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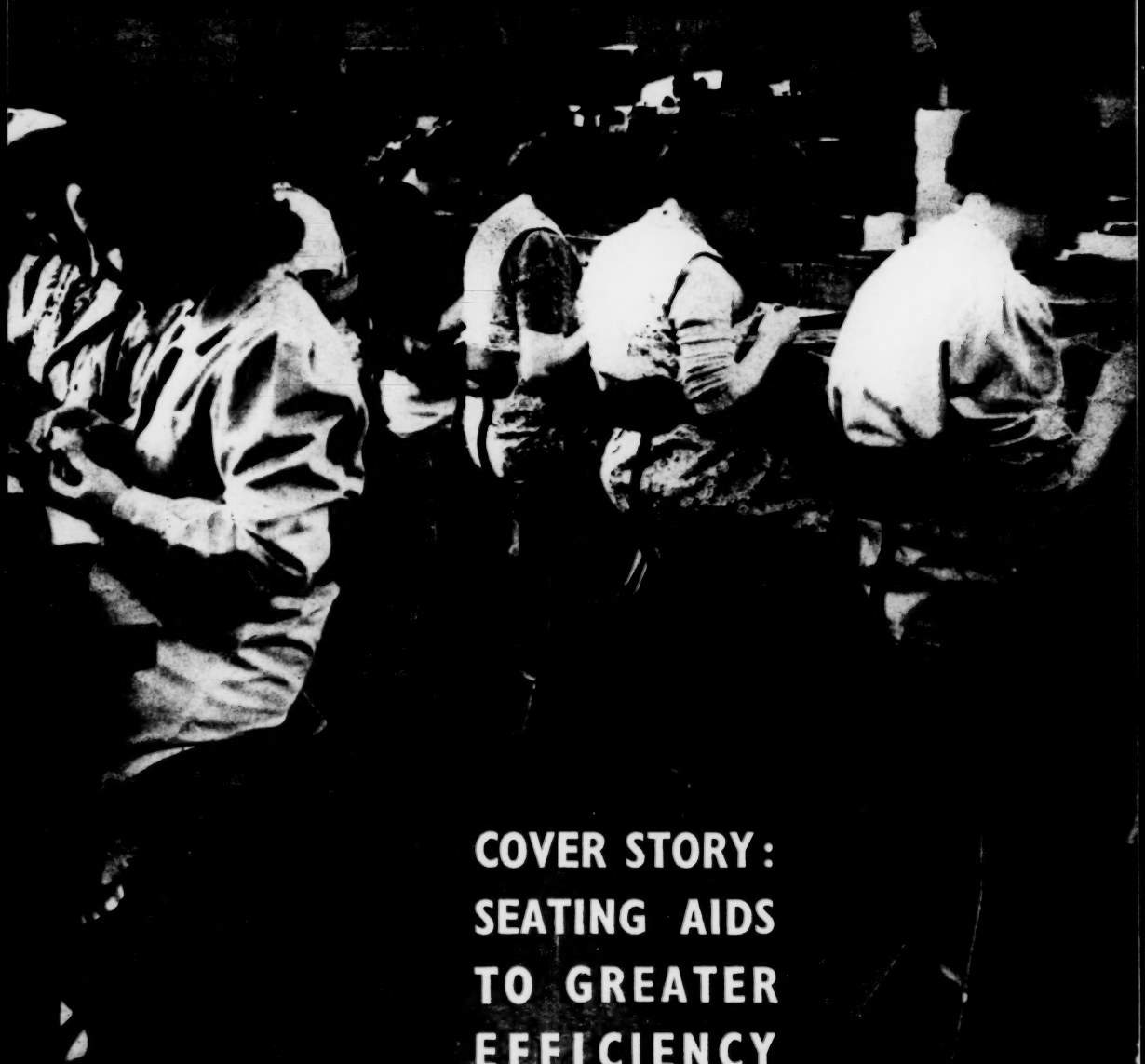

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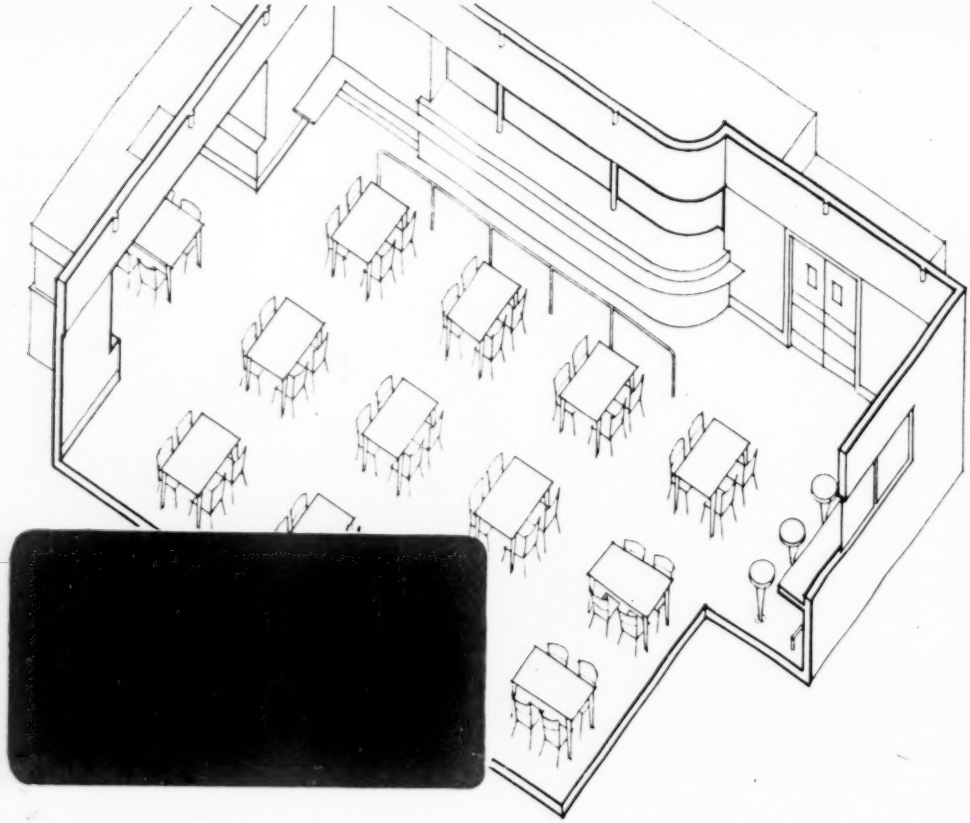

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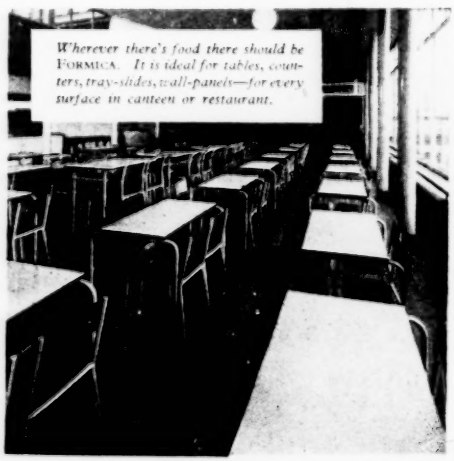
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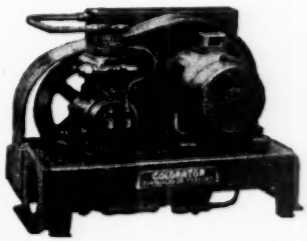

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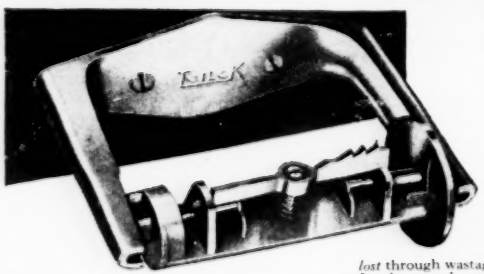

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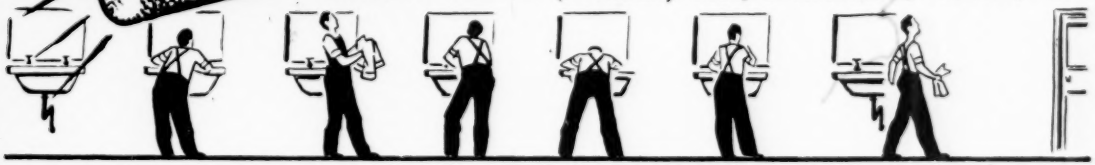

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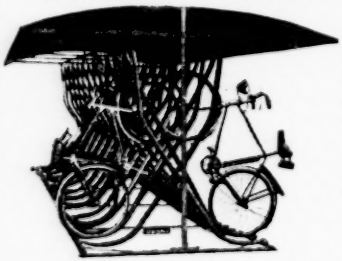

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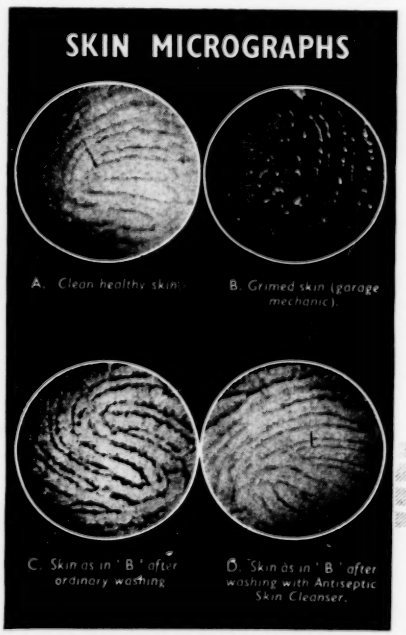
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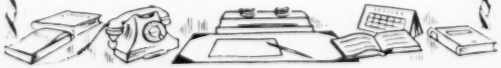

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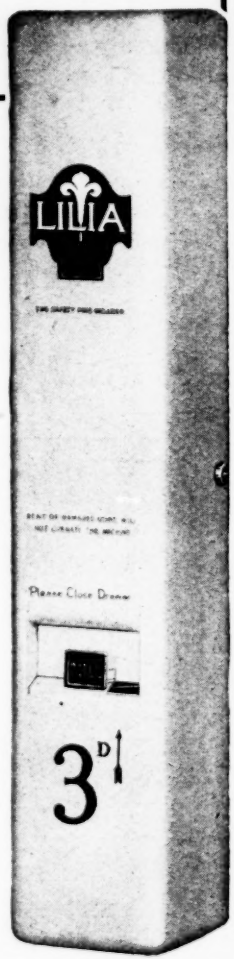

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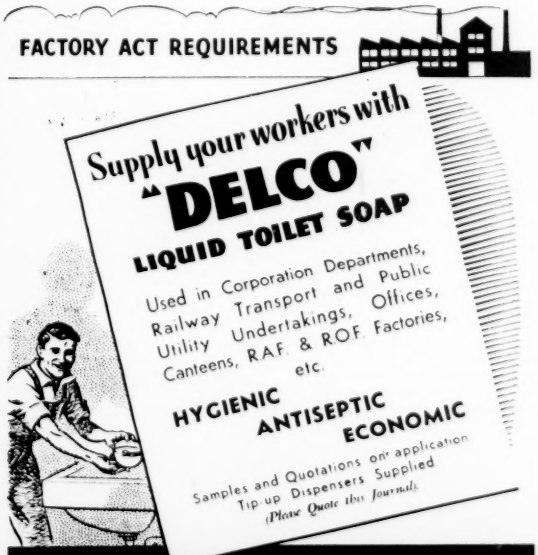
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Published monthly by Shaw Publishing Co. Ltd., 180 Fleet Street, London, E.C.4 (CHA. 8844) Incorporating "Civil Defence Journal and ARP & NFS Review" and "Welfare," London. Subscription rates: 20s. per year, post free in the U.K.; 25s. per year overseas.

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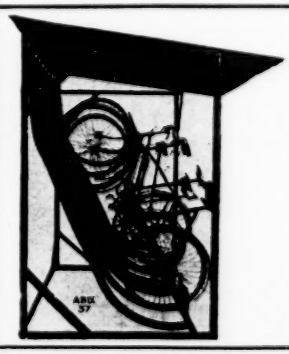

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Formerly one of H.M. Inspectors of Factories

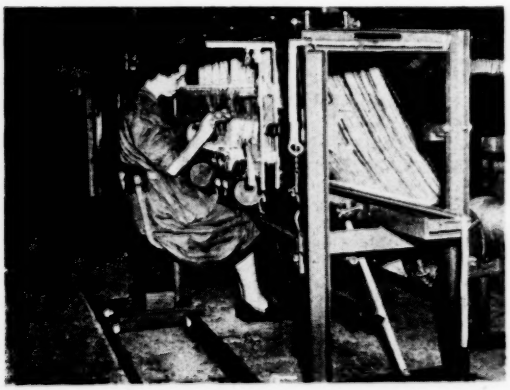
What is a suitable factory seat? This is the question faced by many top executives who know the bare requirements of the 1948 Factories Act but are often in doubt as to how to select the right seating for maximum efficiency. Here a specialist in industrial seating describes the essential needs which all "sitting facilities" should satisfy.

WHEN the Factories Act, 1948, introduced legislation about the provision of seats it was taken by some people to be the last straw on the back of the Welfare State camel. Many an old worker boasted that *he* had never sat down at his work, and told the young apprentice that any man found sitting down at his work in *his* young days would have been dismissed. The man who stands at his work has always had a moral superiority over the man who sits; but, in fact, it is the young apprentice sitting at his work who should have a feeling of moral superiority over the old worker who stands. If he wished to show his superior anatomical knowledge he could explain to the old man that in a correct sitting position energy is saved by the relaxation of thigh and leg muscles. In standing, these muscles are contracted, and energy which could be better used for work is wasted in holding the body upright. Prolonged standing at work is thus a sign of inefficiency because it wastes the fuel of energy on an unessential operation, and fatigues the human machine. This fatigue in turn causes loss of production and can lead to ill-health.

Enlightened firms have recognised these facts for many years, and to them the requirements of section 6 of the Factories Act, 1948, are by no means revolutionary. Section 6 merely consolidates the advice of industrial experts on the adverse effect of prolonged standing on health, efficiency and production.

Briefly, Section 6 requires two things: first, that where work can properly be done sitting, a suitable seat should be provided; and secondly that where work cannot actually be done sitting, but where some opportunities for sitting do occur in the course of work, some seats should be provided.

The fact that the law requires the provision of seats under certain circumstances does not, however, mean that it is intended to keep workers glued to their seats all day long. Although continuous sitting at work is less tiring than continuous standing, experiments have shown that fatigue is reduced to its minimum, and production efficiency best maintained, by frequent changes of working posture. The ideal arrangement is one which allows work to be done sitting or standing as the worker may from time to time prefer. To allow this, the working level should



Comfort and efficiency of this linen mill operator have been studied by the machine designer. He has built-in a sliding seat of adjustable height.
(H.M. Stationery Office photo.)

Comfortable posture is exemplified in our cover picture, which shows girls at work at the Wolverhampton Die Stamping Co.
(Evertaut Ltd. photo.)

be of a height suitable for the standing worker. A high seat can then be provided so that, when sitting, the worker is placed in the same relation to the working level as when standing.

Where work can be done sitting the Act requires a seat which is suitable for the worker and the work he is doing. The importance of this is obvious: seats which are too high or too low will cause strain, discomfort and bad posture. The design of the seat is also important. A seat for work differs considerably from the ordinary domestic chair, for it is designed to hold the worker in an efficient, comfortable and upright position without obstruction to body and arm movement. This position is achieved by the use of the type of back-rest illustrated. This gives support in the small of the back without hampering arm or shoulder movement and without causing pressure on any other part of the body. The back-rest should be curved, and suitable dimensions for it are 10 in. wide and 4 in. deep. The properly designed back-rest plays a most important part in the reduction of fatigue and in maintaining good posture.

The sitting area of the seat should be large enough to give full support to the thighs and to allow changes of position. Recommended measurements are 12 in. to 14 in. from front to back, and 14 in. to 16 in. wide.

The best designed of seats for work is wasted unless a good foot-rest is provided. If the feet cannot completely rest on the floor, there should be a foot-rest separate from the seat and large enough to accommodate the whole foot.

In considering the suitability of a seat for a particular job, all the circumstances of the work must be taken into account. For example, where there is a special risk of fire it may be of advantage to have seats swivelling on supports attached to machines or benches so that they cannot be knocked over and cause obstruction during a fire alarm. Seats of this type are useful too in factories where floors have to be constantly cleaned and where chair legs obstruct cleaning. Sliding seats as shown in the illustration are useful where work involves side-to-side movement.

From his swivel-topped chair, this operator can reach all the drilling machines on the semi-circular table.
(H.M. Stationery Office photo.)

The principal faults which prevent work from being done from a sitting position, or which detract from the benefits of good seating, are inaccessibility of machine controls, bad arrangement of work and inadequate knee space. Controls should, wherever possible, be grouped together within easy reach of the operator. Sloping worktables, gravity feed and dispersal chutes and semi-circular arrangement of work enable the job to be done sitting without uncomfortable stretching or stooping, and encourage good posture.

Space must be allowed for the worker's knees when he is seated—a point often overlooked. There should be a clearance of approximately 12 in. between the front of the seat and any obstruction below the bench or machine table, and 7 in. between the underside of the bench and the level of the seat.

So far only seats for work have been discussed. The provision of "sitting facilities" for occasional use is relatively simple as these seats are only used for resting. Their number, type and placing will depend on the circumstances in each workroom. Where a job involves regular spells of machine minding it is generally advisable for each machine minder to have a seat near his place of work. Where there is occasional waiting time for several workers at a time, a number of seats, benches or tip-up seats in any conveniently accessible place would meet the case, the number depending on how many workers were likely to have waiting time simultaneously. Tip-up seats are particularly useful occasional seats as they take up little space and do not obstruct gangways when not in use.

The practical problems of providing good seating arrangements can generally be overcome with goodwill, ingenuity and common sense. The intangible problems present more difficulty—it is harder to change the attitude of mind of the older worker who is prejudiced against sitting down, or of the old-fashioned employer who would dismiss a man for sitting at his work, than it is to change the arrangement of work. "Habit," wrote Henry Ford, "produces a certain inertia. It will be recalled that when a study was made of shop methods so that workmen might learn to produce with less useless motion and fatigue, it was opposed by the workmen themselves. What most irked them was that it interfered with the well-worn grooves in which they had been accustomed to move."

Encouraging and educating employees to work with less fatigue and more efficiency is therefore as important as the provision of good seating.

Reminder from the Factories Act, 1948

Section 6 (2). Where any employed persons have in the course of their employment reasonable opportunities for sitting without detriment to their work, there shall be provided and maintained for their use suitable facilities for sitting sufficient to enable them to take advantage of these opportunities.

(3). Where a substantial proportion of any work can properly be done sitting:

(a) there shall be provided and maintained for any employed person doing that work a seat of design, construction and dimensions suitable for him and the the work, together with a foot-rest on which he can readily and comfortably support his feet if he cannot do so without a foot-rest; and

(b) the arrangements shall be such that the seat is adequately and properly supported while in use for the purpose for which it is provided.

"To maintain friendly relations with the company and to prosecute its policy with energy and understanding" is the first aim of the foremen's group described below. Formed to combat the impersonality which replaced the old "family" atmosphere as their firm grew, the members of the group are doing invaluable work to aid—and aided by—management.

Our Foremen's Group Has Forged a Close Link with Management

By J. A. PRITCHARD, D.F.C.

Personnel Manager, Serck Radiators Ltd.

Symbolic of the *cameraderie* engendered by the group are its membership book, annual magazine and annual dinner menu card.

A FOREMEN'S group brings many benefits to a company, but none greater than the facility it offers to management for the prosecution of company policy. We have found that meetings can be convened by the group's secretary at reasonably short notice to discuss any item of policy with a member of the higher management; and as constructive criticism is welcomed, important amendments have been made to draft schemes after such talks. These discussions, I must add, take place in the foremen's own time.

The Serck foremen's group was formed in 1949, and today it forms an integral part of our organisation.

The company, founded in 1919, has always enjoyed a reputation for first-class employee relations, and during the 'twenties and 'thirties the family spirit was very much in evidence throughout the concern. The manufacture of our original product, the motor-car radiator, continues, but since the early days the firm's activities have been steadily extended to cover the manufacture of a very wide range of heat transfer equipment, with a consequent increase in the size of its labour force.

During the war the *cameraderie* which existed between management and employees was maintained by common duties such as fire-watching, but with the end of the war, and reversion to normal industrial life, daily discourse at all levels became impossible. By 1946, we employed a total of 1,500 people. We had, in fact, changed from a family concern to a large company.

No members of the organisation were more conscious of this change than our foremen. After discussions among themselves, they suggested through the personnel department that they should form themselves into a group whose principal object would be to further the aims of industry in general and of the company in particular. The suggestion was speedily approved by the board, and the following constitution drawn up.

"The group shall be composed of foremen having staff status and in charge of a section engaged in manual labour. It shall be officered by a chairman, vice-chairman, secretary and a committee of four members. Its aims shall be:

"1. *To maintain friendly relations with the company and to prosecute the company's policy with energy and understanding.*

"2. To advance the dignity of the group by encouraging education through any channel which might present itself, and to invite the company to help in furthering this aim.

"3. *To enable any member to bring forward for discussion any matter (except pay and managerial policy) which could, if necessary, be referred to higher management.*

"4. To hold an annual dinner and invite the directors to attend.

"5. To have an annual rally of members.

"6. To present to members a suitable gift on their retirement."

The rules are straightforward and concise, covering all the usual aspects of club or society organisation. Membership subscription is £1 1s. and the weekly donation to group funds is 1s., deducted from wages. Finance is controlled by the group's executive committee, but the company cashier serves as general treasurer.

Each January, an engagement programme for the year is circulated to members for inclusion in their

pocket-sized membership folder. Most engagements are lectures, usually held in the staff canteen after work on Friday afternoons. Refreshments are provided, and apart from the provision of the room, heating and lighting, all costs are borne by the group. The lectures are often illustrated by sound films and lantern slides and last nearly two hours, including time for questions and answers. Most of the company's senior executives have talked about their own job, and judging by the earnest discussions afterwards, our foremen are anxious to increase their already quite considerable knowledge of industrial and commercial organisation. Choice of speakers is not limited to those within the company. The group has been addressed by visitors from appropriate institutions, other firms and Government departments.

Loyalty Can Be Won

Executives and technicians are invited both to the lectures and to the social events, and thus there has been forged a close link between foremen and management which is of inestimable value to the company. The wise general manager realises that the success of his firm depends largely on the co-operation and efficiency of his foremen, whose loyalty can be won if their aims and ideals are appreciated by top management. Although today the emphasis is on the recruitment of the young and technically highly-qualified supervisor, such loyalty cannot be replaced merely by an examination certificate.

I feel that, by their initiative and corporate spirit, the Serck foremen have lived up to their group motto, *Tempora mutantur, et nos mutamur in illis*—"Times change, and we with them."

Tips for Foremen

"YOU and Your Job" is designed to help supervisors at Armstrongs Patents Co. Ltd. in their work. As the foreword by the managing director states, this booklet is by no means complete: some points must be left to the supervisor's discretion and initiative. It outlines the duties and responsibilities of supervisors in both production and personnel relations. Tips on how to develop good leadership are combined with information on procedure for settlement of disputes, dismissals, overtime regulations, etc.

Safety in the Smaller Firm—2

How to Plan Your Safety Organisation

By **ROBERT McKOWN** *formerly Editor, British Journal of Industrial Safety and Industrial Accident Prevention Bulletin*

Accident prevention is part of efficient production, and no firm is too small to need a safety organisation. Last month our contributor stated the six essentials of such a unit. They are :

1. Management support. 2. Co-ordination by one man.
3. A safety committee. 4. Regular inspections.
5. Planned Propaganda. 6. Keeping statistics.

Here he deals with the first five of these. His next article will be concerned with statistics.

THE six essential features of a works safety organisation can be provided *in any firm*, regardless of size. In last month's article it was suggested that the first of these essentials—the wholehearted support of the management—might well be more readily obtainable in a small or medium-sized works than in a large one.

Before going on to discuss the other five points, it will be as well to say a word about the real meaning of managerial support. This means much more than a sympathetic interest in safety, coupled with a willingness to appoint someone to organise a safety campaign. It means that the management must give as much consideration to the views of the safety officer as to those of the production manager or sales manager. Also, they must themselves have a clear understanding of the fundamentals of works safety organisation, so that they can not only choose the right man to undertake the work but can judge accurately the results he achieves.

This brings us to the second essential of a works safety organisation—the co-ordination of all safety work by one person. It is this item that the smaller firms are most likely to regard as impracticable, because the term "safety officer" conjures up visions of a full-time specialist whose employment is beyond both the means and the needs of many firms. The truth is that while the person in charge of safety *must* be properly trained for the job, he need not necessarily devote all his time to accident prevention. In a small firm the works manager himself may be able to find time for such safety work as is necessary. Where this is not possible, it will be a question of finding some other suitable member of the staff who can add safety organisation to his other duties.

On the whole, it is probably best to make safety the responsibility of someone connected with production because *accident prevention is really part of efficient production*. On the other hand, many personnel managers and welfare officers have successfully added accident prevention to their responsibilities. As the safety officer's work should be advisory and not executive, it does not greatly matter what other duties are combined with accident prevention so long as they leave the individual sufficient time to do his safety work properly, and so long as it is realised by everyone that safety is of at least equal importance to any other duty.

What is of vital importance is that the person in charge of safety should have sufficient training and status. Attendance at a recognised training course, such as those run by the Royal Society for the Prevention of

Accidents in conjunction with the Ministry of Labour, should be regarded as a minimum. This should be supplemented by personal study of the safety organisations in other firms and by contact, at conferences and so on, with other and more experienced safety officers. A full-time safety officer should have a status equal to that of a departmental manager, and the same principle should be accepted in choosing someone to do the work on a part-time basis. Without such status the man responsible for accident prevention will be at a disadvantage in his relations with other members of the management.

Once appointed, the safety officer's first task will be to see how the remaining essentials of a works safety organisation can be adapted to his own works. It will be remembered that these are: a works safety committee; inspections, job safety analysis and investigations; propaganda; and the keeping of statistics.

A works safety committee is something that can be instituted in any firm, whatever the size. Indeed, the small and medium-sized works may well have another advantage here. In a very big works it is difficult to get adequate representation without making the committee unworkably large or else splitting it up into sections. The smaller the works, the easier it should be to get a committee which will be an effective channel for the employees' suggestions and will, at the same time, remain of manageable size.

The very small works, with twenty or thirty employees, may be able to dispense with a safety committee, though there is much to be said for regular meetings between manager, foreman and an elected representative of the men. In any works larger than this—that is, in any works where frequent personal contact between management and every employee is unlikely—a committee is both necessary and possible.

It may be convenient to combine the safety committee with some other joint committee already established. There is no great objection to this, so long as safety is not regarded as less important than the committee's other business. One way of emphasising its importance is to put accident prevention well to the top of the agenda.

Safety inspections, and the analysis of all operations so as to detect possible hazards, are activities that can be carried on in any works, regardless of size. All that is necessary is that the safety officer should have sufficient training and experience to be able to do such work properly, and that his other duties should allow him the necessary time. The same is true of accident investigations, with the addition that in a large works the safety officer may not have time to conduct a personal investigation into every accident while in a smaller works, with fewer accidents, this should be much easier.

Propaganda is necessary in every works, to keep the employees continuously conscious of safety. The smaller firms, however, can probably afford to dispense with the more elaborate forms of propaganda, such as safety weeks, inter-departmental competitions, and specially produced posters with a local application. The posters and leaflets issued by national organisations such as Ro.S.P.A. will usually be found adequate, and well within the means of even the smallest firm.

The sixth essential of a works safety organisation is the keeping of adequate statistics. This subject, in its application to the smaller works, will be dealt with in a separate article.

Propaganda is essential for getting over the safety message, but smaller firms need not spend a lot on it. Posters like these new ones issued by the Royal Society for the Prevention of Accidents cost very little but have considerable impact. Ro.S.P.A. also issue some excellent leaflets.

Getting the Best From Retail Staff—1

Thorough Training Starts in the Classroom

By LEONARD TAYLOR

As in many other businesses, the assistant in the bookselling firm of W. H. Smith and Son Ltd. is apt to be regarded by the cu omer as a mentor as well as a tradesman. If he is to maintain the good name of his firm, he must therefore combine some of the qualities of a knowledgeable salesman, businessman and psychologist. This article explains how Smith's do their best to ensure that their assistants measure up to such exacting standards.

How to take an order. Two pupils at the Kingston-on-Thames shop under instruction. Theoretical training is given in a room over the shop.

MUCH useful knowledge of retailing can easily be instilled in a classroom. W. H. Smith and Son have selected a number of their larger branches as training schools and two or three young men are transferred to each of them for training. The manager of the branch is responsible for them, but to assist him a younger relief manager is also appointed as an instructor.

For theoretical training, in a room above the shop, the instructor takes his pupils through the business procedure of each department in the easy informal manner that is possible when a class is small. An equal amount of time is spent on the floor of the shop, and at busy periods the pupils serve behind the counter with the instructor always at hand to help them out when necessary. By these means theory and practice are neatly interwoven without the possibility of mistakes that might cost goodwill.

Something more is required, however. The boy has his business career interrupted by military service. Those who come back need refresher courses. Those who do not must be replaced by new men who need training from the beginning. Further, the bookseller has much to learn. He may be asked for 2,000 magazines, periodicals and newspapers. Seventeen thousand different books are published each year, many of them remaining in print for some years afterwards. He must assess the public demand for these, have some judgment of their merits, and must know where to get them if they are wanted.

His stationery stock may include more than 3,000 different items, and he must know enough about them to discuss the qualities of papers, the mechanism of typewriters and fountain pens, the quality of leather, ink, pencils and account books. He must know something about bookbinding, press advertising and printing.

Beyond all this he must be a salesman and a business man, and since he is dealing in the equipment of thought, he must have a better insight than most retailers into his customers' minds.

Extra Study Encouraged

Obviously, then, the young assistant must be encouraged to go in for more than courses of instruction in business hours. W. H. Smith's pay 75 per cent of the fees and of the fares incurred by their young people who go to classes in their own time. This offer is not confined to business subjects. The study of professional subjects is still further encouraged by the offer of rewards amounting to as much as £25 for those who obtain the diplomas of the Booksellers' or Stationers' Association, each of which involve a three-year course of study which can be taken by correspondence or at evening institutes in the big towns.

To give assistants a wider knowledge of their own organisation a selected number of them are brought to London every week. They travel and are lodged at the firm's expense, are shown over the head office organisation and introduced to those workers with whom they correspond in the course of their business. There are also courses of instruction in the art of window and interior display.

Finally, the company publish monthly a specialised business training magazine, *Talking Shop*, the function of which is to comment in an interesting way on regulations for the conduct of business issued from head office, to provide a forum in which assistants can air their opinions and make suggestions, and generally—by means of a magazine which is small but equal in quality to those sold over the counter—to stimulate interest in business matters.

No Extra Holiday

CLAIM for a third week's holiday with pay for nearly 8,000 postmen has again been rejected by the Post Office on grounds of manpower shortage.

Getting the Best From Retail Staff—2

Staff Comfort Builds Customer Goodwill

By A CORRESPONDENT

In the new department store built by Bovis Ltd. for E. Mayes and Son Ltd., Southampton, a whole wing was allocated to staff welfare and training. The Mayes management believe that a contented, friendly atmosphere among the staff is automatically transmitted to the customer with every sale.

THE management of this attractive modern store, designed to give maximum "customer comfort"—escalators, air-conditioning, latest electrical equipment for speedy cash and credit transactions—have also devoted much thought and money in planning "staff comfort." They believe that a contented, friendly atmosphere among the staff is automatically transmitted to the customer with every sale.

The welfare department, a self-contained suite, is equipped to deal with emergencies and to treat minor ills. The rest-room has three beds, and adjoining it are a toilet and washbasin. Also leading from the rest-room is the dispensary where all the usual first-aid equipment is kept. The doctor's room completes the suite, and this is equipped with an examination couch, scales, sight-testing charts, a stretcher and small invalid chair. The latter has proved very useful, as it is easily negotiated in lifts.

Staff have a routine medical check-up by the store's doctor as soon as possible after starting work, and if further medical advice is required, an appointment is arranged with the doctor during her weekly visits.

Absenteeism has been cut to a minimum, not only by the fact that illness can be dealt with adequately if it occurs at work, *but also by payment of a full day's pay if an employee reports for work by* 12.30 *p.m.*

For morning coffee, lunches and teas, the staff use the sunny canteen which seats 200. The well-equipped kitchen has pastry, steam and roasting ovens, electric mixers, vegetable mashers and potato peelers. Large heat extractors fitted over the ovens maintain an even temperature in the kitchen. The servery has extensive hotplates which ensure that all meals are served really hot.

The large sun-roof, approached through french windows from the canteen, is an ideal place for the staff to sit and relax. It is hoped to develop facilities for deck games here.

Cloakrooms are fitted with coat racks, with a shelf above for hats and another below for shoes. No lockers are provided, but there is a full-time attendant who is responsible for all goods left in the cloakroom. Nearby is the staff parcels office where all purchases and shopping bags are handed in for safe keeping, a cloakroom ticket being given for each deposit. Here, too, is a refrigerator for storing perishable goods. No extra time is given for outside shopping, so the staff are encouraged to do it on their way to work or in the lunch break. Adequate time is allowed for internal shopping and the staff make good use of this privilege and so benefit from the discount allowed on all their purchases. These goods are checked against a copy of the sales check in the parcels office, from which they are collected at closing time.

A planned personnel policy is laid down by management. This includes sickness benefit, after one year's service, of four weeks with full pay; benefit may be accumulated each year. After five years' service, employees are invited to join the pension scheme. Permanent staff are also asked to join the National Savings provident scheme, to which the firm contributes.

Training courses are run in the spring and autumn for sales staff. They include refresher courses on store system and salesmanship and lectures of a more general interest connected with merchandising. Courses are held in the staff training room. Every member of the staff is seen twice a year when a report is given on their work, lateness, absenteeism, etc., for the past six months. Salaries are assessed on this report.

Suggestions are welcomed and money prizes given for every one put into effect. A banner is awarded to the department with the highest achievement each month and every member of that department receives a cash bonus.

All appointments and dismissals are made through the staff office, which is regarded as an "independent" office where all employees may go and express their views quite frankly.

Labour turnover is low and recruitment has not been unduly difficult even in a town where there is full employment. The management believe that a progressive personnel policy backed by good welfare arrangements has contributed much to this satisfactory state of affairs.

The staff can leave their purchases in the parcels room until the end of the working day. Here a chicken is being handed in for storage in the refrigerator. Time is allowed for internal shopping.

The "Rule of Three" Pays

THE ingenuity of three shop stewards and the ready co-operation of management and workers has brought about an increase in productivity of 20 per cent at the Coventry factory of George Wilson Gas Meters Ltd., without a penny being spent on either capital equipment or reorganisation.

Shop stewards, after full discussion with the men in the meter tin shop of the factory, evolved a plan for rearrangement of labour.

The traditional method of production worked on the principle that one man assembled one meter. There was no sharing of the work. He drew out of the stores exactly twelve sets of meter parts at a time. After completing operation No. 1 he put down the particular soldering irons for the job and prepared and picked up the soldering irons for No. 2. That done, he put away No. 2 irons and prepared the jigs and irons for operation No. 3. The shop stewards and the men examined these processes carefully and decided that the frequent changes of irons and jigs was a waste of time that could be avoided. They argued that if, instead of one man doing the job, there were three men working as a team, the waste would be eliminated. Further, that this team or gang work would produce the best and fastest man for each operation.

The shop stewards went to the management with their plan and asked for two concessions—that two sub-assemblies should be done by labour outside the gangs. The management agreed and the new method was given a month's trial. It was immediately successful. Production went up by 20 per cent and the increase has been maintained. The lower paid workers have increased their earnings by up to 30 per cent and the top rate workers have earned increases of around 5 per cent. The top rate man has in fact put some of his skill into the pool to the advantage of the lower paid, and everybody is happy. Subsidiary advantages of the introduction of the gang system are savings in labour in the stores and in transport.

Key to Productivity

SUPERVISORS, far more than workers themselves, hold the key to both quantity and quality of production. This is the main conclusion of a research group of the University of Michigan after two intensive surveys of railway gangers and clerical workers.

Data gathered from seventy-two railway section gangs—half of them high producers and half low producers—showed that foremen of the highest producing sections considered themselves *leaders* and not just superior workmen. A large proportion of foremen in this group spent 50 per cent or more of their time on *supervision*, instead of on straight production. They took a more personal interest in the men under them, and thought a lot better of their men than did the foremen in the low producing group.

(Condensed from *Supervision*, 2/52.)

Accidents Cut by 84%

A REDUCTION of 84 per cent in lost-time accidents, and of 25 per cent in minor injuries, resulted from the safety programme adopted by Stone Container Corporation's Chicago division, a factory employing about 500 people.

Main points of their programme are as follows:

1. Safety devices are constantly being put on machines and equipment.
2. Safety shoes are worn by more than 75 per cent of employees. The company pays part of the purchase price.
3. Safety goggles are worn by all employees working on lathes or milling machines.
4. Wearing of safe and suitable clothing is constantly encouraged.
5. Plant lighting has been specially studied and improved.
6. Colour has been used as a direct aid to safe operations. Ceilings and beams are painted white; machines are green; all nip points, operating wheels, etc., are yellow; electric switches are yellow.
7. Good housekeeping is a "must." Nine cleaners are kept busy all the time, and all employees are educated in tidy and safe methods of working.

An active safety committee runs the programme, with the whole-hearted backing of top management. Safety inspection plays a big part in Stone's accident prevention programme. Fast action is the rule in correcting hazards. Publicity and safety promotion are simple and effective.

(Condensed from *Factory Management and Maintenance*, 2/52.)

Developing Initiative

BOYS joining Hoover Ltd. at 15½ take a pre-apprenticeship course of four months in the training workshop and various sections of the factory. At 16 they may enter an annual open examination for apprenticeship, in competition with boys from secondary schools. Pre-apprentices who do not take up apprenticeship continue training for trades such as plumbers, mechanics, fitters, etc. Apprentices receive a wide range of engineering experience, and a period in the drawing office. All attend technical classes at least one day a week, while more advanced students take courses lasting six months or a year at technical college or university. Progress records are kept, and there are periodic assessments by examination or interview. Reports are also sent to parents.

Training is aimed at inculcating a

£10 FOR A GOOD IDEA

An employee of Igranic Electric Co. Ltd. earned £10 for suggesting a new means of riveting felt packing to sheet steel boxes to make them dust-proof. Previously, dust-proofed boxes had only been made in very small numbers, but recently a batch of seventy-five had to be modified. The new jig which this employee designed clamps the felt and steel retaining strip in position. The necessary holes can then be drilled, and their rivets secured, at one setting.

sense of responsibility, and developing initiative. Hobbies, sports and social activities are encouraged.

Meals at reduced prices, health supervision, provision of overalls, use of the firm's library, facilities for visits abroad for work or holidays, are other means by which the company aim to produce good workers and good citizens.

(Condensed from *The Factory Manager*, 3/52.)

Oldest Suggestion Scheme?

THIS year marks the jubilee of the Cadbury Bros. Ltd. suggestion scheme which, in half a century, had handled 200,000 ideas from employees and disbursed over £22,000. When Mr. George Cadbury, Jnr., brought the idea back from America in 1902, the project was tried out gradually and the present technique is one that has been achieved mainly by trial and error.

The selection committee operates on the democratic principle, with workers and management equally represented. Every suggestion considered is allotted a number and no name is mentioned until a decision is made, so that all risk of prejudiced judgment is removed. Mr. A. D. Jennings, chairman of the men's section of the scheme, and Mr. G. O. Jones, secretary, believe that the scheme is the oldest in Britain. One award made was for £250, and at the recent annual distribution of awards more than £400 was distributed, the prize list being the longest since the war.

Partners for 40 Years

"PARTNERS' Handbook" is a most comprehensive guide to the responsibilities and rewards of membership of the John Lewis Partnership, an experiment in employee-shareholding of some 40 years' standing. The Partnership was finalised in 1950, when the chairman, Mr. Spedan Lewis, signed a Settlement in Trust whereby he gave the controlling interest in the firm to the trustees, so that in essence the Partnership belongs to all employed in it.

The booklet gives information on the profit-sharing scheme itself, general rules of the organisation, welfare facilities available, a chart of the organisation, etc. A section dealing with careers within the organisation shows opportunities in selling and buying, factory or workroom experience, office work, estate management, building and farming, etc.

Think of a Title

FIRST issue of a staff magazine for Glasgow Corporation transport department appeared in March. In it the staff are invited to supply a title for the journal, which is to appear quarterly, price 3d.

DRY CLEANERS-TO-BE LEARN THEIR JOB

These three young Africans have travelled all the way from the Gold Coast to learn the business of dry cleaning and dyeing. They have come to England under the auspices of the British Council, and are training at the Walthamstow works of Achille Serre Ltd. When they return in the autumn they will be competent to set up their own businesses.

Ideas & News from House Magazines

Good Deeds Done

Ferguslie Mills (J. and P. Coats Ltd.) Boy Scout troop entertained twenty-four local old-age pensioners to a party recently, and provided entertainment and a gift for each guest.

The Mills' comforts fund has given £2,343 to fifty-seven hospitals and institutions from contributions received during 1951. **(News Reel.)**

Returning the Compliment

The 250 long-service employees of Sperry Gyroscope Co. Ltd., reversed the usual proceedings at their last annual dinner by presenting a clock to Mr. Arthur Hillier, O.B.E., who has presided over these meetings for the past 17 years, and was himself celebrating 35 years' service with the company. Fifty-two men and one woman received gold watches in recognition of 15 years' service. **(Sperry Topics.)**

Students and Pensioners

No fewer than 293 students qualified for awards at the annual prize-giving at Stanton Ironworks. Presentations were made by Mr. F. Bray, Permanent Under-secretary, Minister of Education.

At a reunion party for pensioners, Mr. F. Scopes, managing director, reported that the combined ages of Stanton Works pensioners (excluding staff and widows) totalled 17,000 years. Average age was 73¼. Combined service with the company totalled 10,000 years, and the average individual service represented was 43 years. **(The Stantonian.)**

Building Workers, Take Care!

The building industry probably has the heaviest accident record in the country (mining excepted). In 1950, there were 19,295 accidents in building, compared with 192,210 over the whole country; nearly 10 per cent. The proportion of fatal accidents in the industry is high; 239 out of 738, or nearly 33 per cent.

In an appeal for care and co-operation in preventing accidents, employees of John Laing and Son Ltd. are reminded that most of their accidents result in cuts and abrasions; nail in the foot accounts for fifty or sixty injuries a month; falling persons account for thirty-five to forty-five accidents a month; falling articles for about the same number; eye injuries, falls from vehicles, and removal of machine guards are other causes. The majority of these are due to lack of thought or to carelessness. **(Team Spirit.)**

Workers' Market

National savings at Thorncliffe totalled £13,315 for the first three months of this year, an increase of £3,800 over the same period last year. This represents an average saving of £1,664 per week.

During its first four months' working the Thorncliffe Mart offered 870 articles for sale, of which 567 found buyers and realised a total of £362. The Mart opens once a week for the sale of employees' secondhand goods. **(Thorncliffe News.)**

How We Train Industry's Rescue Instructors

By S. M. EVANS, M.B.E., A.R.I.B.A., A.R.I.C.S.

County Chief Rescue Officer, County Council of Middlesex

Every industrial Civil Defence organisation should have its rescue parties. By immediate action they would be able to save lives which would otherwise be lost, and they would certainly ease the load on the Corps. Their work demands specialised training of a high standard. In this article, Mr. Evans concludes his account of the Middlesex training course which is turning out, for firms in the county, instructors who are fully qualified to go back and train their colleagues in this exacting and important branch of Civil Defence.

First Week.

Monday.	Introduction. Elements of building construction. Types of buildings, unframed and framed. Forms of collapse, pancaking, voids, etc. Recognition of dangerous structures. Filmstrip "Forms of Collapse." Issue of personal equipment. P. Rescue vehicle drills and equipment. Rescue reconnaissance and stages of rescue. P. Ropes, care and maintenance, rescue knots.
Tuesday.	Lashings. P. Remote breathing apparatus, uses and limitations. P. Debris tunnelling—objects, methods to be adopted, propping and strutting, connecting voids. Films "Debris Tunnelling" and "Rescue Reconnaissance." Probe.
Wednesday.	P. Blanketing and lashing casualty to stretcher, use of manifold harness and webbing bands. P. Reeving tackle. Derricks, sheerlegs and gyns. P. Use of blocks and tackle with stretcher sling. P. Yale Pul-Lift. Ladder drill. Approach to incident. Probe. Damage to utility services. Recovery of dead and valuables. Labelling of casualties. Filmstrip "The Problem of Civil Defence."
Thursday.	P. Rescue from heights and basements. P. Improvised stretchers. Basic rescue training. Hand seats.
Friday.	P. Emergency methods of rescue and handling of casualties on stretchers. P. Use of small tools in confined spaces. Probe. "Good instruction."

Second Week.

Monday.	Practice lecturettes. P. Oxy-acetylene cutting. Debris clearance. Film "Hints to Instructors." Rescue in presence of war gas and radioactivity.
Tuesday.	Shoring of damaged buildings. Principles of levering and jacking. Staging exercises. Probe.
Wednesday.	P. Temporary shoring. P. Application of levers and jacks. P. Practical revision. Faking casualties.
Thursday.	P. Practice students' lesson. Examination lecturettes.
Friday.	P. Practical examination. Written examination. Discussion. Handing in personal equipment.

Note: "P" signifies practical session.

NOBODY wants another war. Few people really like the idea of warlike preparations. Yet if we are to avert the risk, we must—among other things—proceed with Civil Defence. An efficient scheme for the protection of industrial and commercial premises, a scheme under which industrial Civil Defence units work under their own officers and collaborate with the public services, will greatly strengthen the country's defences and do much to prevent war.

The rescue of persons from collapsed buildings, or from premises which may have been rendered unsafe by enemy action, is a very important part of Civil Defence. It requires special technical knowledge and training. This skill will be available in the rescue section of the Civil Defence Corps and it is possible that at least in the smaller industrial establishments the main reliance will have to be placed on the Corps for this duty if the damage is heavy.

Nevertheless a team trained in rescue duties can be the means of saving life which might otherwise be lost while the rescue section of the Corps is on its way, or if the attack is so heavy that the Corps is fully extended, which might cause delay in help arriving. Each industrial and commercial firm should, therefore, organise rescue parties according to the number of works and so on.

These parties should be trained and equipped to normal Civil Defence standards, even though special local circumstances may call for some variations. It is also necessary to impart a certain amount of elementary rescue knowledge to all Civil Defence volunteers forming the wardens and pioneer sections where such are formed, as very valuable help in the handling of casualties and dealing with those lightly trapped can be afforded by those who have received the basic rescue course in accordance with the Home Office *Manual of Basic Training, Vol.* II, *Pamphlet No.* 4, *"Basic Rescue."*

Many industrial and commercial Civil Defence officers are now assessing their requirements and approaching the Civil Defence officers of the appropriate county, county borough or large burgh to ascertain what training arrangements are possible. The story of how Middlesex County Council train selected instructors from industrial Civil Defence units in rescue work was begun last month. The aim is, of course, to send these men back to their units well equipped to give instruction to others in this vital branch of Civil Defence.

A typical Middlesex syllabus—it was, in fact, that for Course No. 2—is reproduced opposite. In preparing it, the following principles were adhered to:

Rescue Principles

Any difficult rescue work involving the release of trapped casualties in heavily damaged and dangerous buildings, or the location and extrication of people buried under unstable debris, calls for the exercise of skilled judgment and practical knowledge. All those forming rescue parties must be well trained in the recognition of dangerous buildings, technical methods of approach and debris handling. Lives may be endangered by lack of knowledge of the basic principles of rescue work or by failure to apply the skill and care necessary to ensure that further collapse does not occur or further injury is caused to the casualties or to the rescue workers themselves.

One of the first essentials in training is that a rescue party man should be able to recognise the various types of buildings in his works or establishment, and to have some idea of how they might be affected by bombing. Only by some appreciation of the various forms of structural movement and partial collapse can one estimate the probable location of trapped casualties, or enter damaged buildings with reasonable safety.

It is in the study of the various types of construction and forms of collapse that those anxious to release any trapped persons are most likely to succeed. Most collapsed structures contain voids caused by obstructions to total collapse such as blocks of masonry, portions of the structure not entirely disintegrated, heavy furniture, partial collapses, etc. It is in these voids that people may remain buried but still alive. It is the realisation that even in a seemingly totally destroyed building there may be such voids in which people are still alive that provides the greatest incentive to rescue work and it is on the care, skill and speed used in the task of releasing them that success depends.

The operational efficiency of the rescue organisation depends largely on the knowledge and ability of its officers and leaders. They occupy positions of great responsibility both in the organisation and at incidents, for rescue work calls for considerable self-confidence and courage on the part of all concerned. Leaders should therefore be carefully chosen, as one who is easily demoralised or unable to cope in an emergency is a source of weakness even though his technical knowledge may be sound and extensive.

The leader of a party is a key man. In operations he will have to make vital decisions which may affect the lives of many persons and his judgment must be sound and based on the solid foundation of experience and adequate training.

At this stage of Civil Defence training for industry such also are the qualifications of those who should, by preference, be chosen to undertake a technical rescue instructor's course. There is the possibility that the man chosen to take on this important work may eventually, if he qualifies, hold an important position in the industrial organisation and be considered an expert upon whom much responsibility will devolve.

Lowering a "casualty" horizontally. Note flying shores, erected by trainees between buildings.

More practical work. If injuries permit, casualties can be brought to safety vertically, like this.

Three of the instructional staff standing by one of the rescue vehicles used on the course. Left to right, G. W. Thorp, F. T. Rogers, G. M. (County assistant chief rescue officer), and H. J. Ralphs.

"Apprenticeships for Women" Plea

"OUR central problem is how to make the best use of our greatest national asset, our working population," said Sir Walter Monckton, M.P., the Minister of Labour, when he opened the conference on "Human Relations in Industry," held in London from March 18-20. Over 400 delegates discussed: (1) the opportunity to work; (2) the capacity of the worker; (3) wastage of manpower; (4) the will to work. Some of their conclusions are reported below.

Older workers should not be denied the opportunity to work on grounds of age alone. Ability, not date of birth, should be the test. Where age became a handicap, they should be transferred to more suitable work. One delegate suggested that if more jobs were mechanised, there would be no need to employ older workers. **Professional, technical and managerial grades.** A change of attitude was necessary to provide for "demotion without disgrace." An enquiry should be made into the conditions of pensions schemes which at present reduced the mobility of labour.

Women should retain their right to work, but should not be pressed to take regular employment, especially if they had young children. A woman delegate urged that all women should be able to obtain skilled training, preferably through apprenticeship schemes.

Selection and training. Industry should use proved scientific methods in selection and training of workers. Small firms could run joint schemes. Provision should also be made for training "the trainers." **Apprenticeship.** There should be greater flexibility in the age of entry and a reduction in the length of apprenticeship where possible. Induction courses could assist new entrants whose attitude to working life was often wrongly influenced by older workers

Leadership Qualities

Supervisors. Too great an emphasis on leadership qualities was as bad as too little. Training should not be divorced from practical skills. Increased incentives were needed to attract the best types for supervision. One delegate stated that British foremen were the worst paid in the world, and often earned less than the men on the bench. Management (and workers) needed education in industrial relations. Junior managers like the one who thought shop stewards were "the men who brought the tea round" were still far too common.

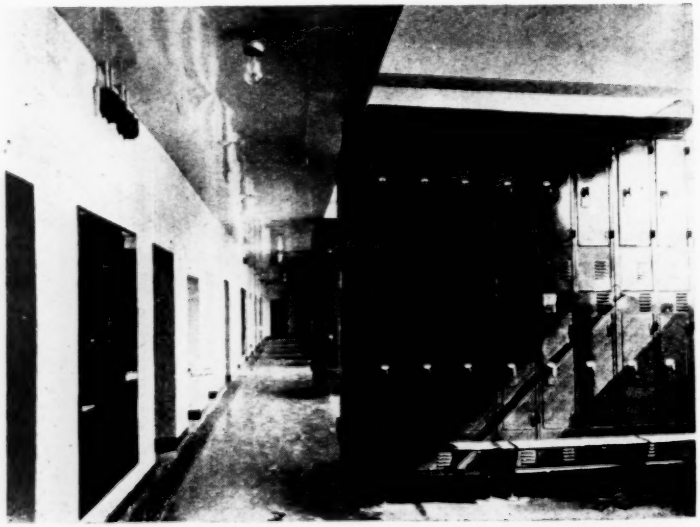
Wastage of manpower. Joint consultation at the planning and design stage in machine and factory lay-out was essential in accident prevention. The American method of educating the worker to be safety conscious should be adopted to implement our own legal requirements. Trade unions could help by educating their membership. **Research.** Better arrangements were needed for advising research bodies, such as the Industrial Health Research Board, on which were the most urgent problems to be dealt with. The Ministry of Labour should appoint a small advisory committee to ensure liaison between research workers and industry. Results of research would then be made more widely known and applied.

Joint consultation, to be effective, must be accepted without reserve at all levels of the organisation, and should include both formal and informal consultation. Where fully understood, there was no danger that it would undermine the authority of management. Management should be trained to listen to workers and understand their point of view; shop stewards should be trained to express the point of view of those they represent and not their own personal prejudices. **Incentives.** Substantial advantages could be gained by the adoption of schemes of payment-by-results. Other incentives, such as job satisfaction, pride in the firm, good relations with workmates, and the spirit of competition, were important.

"Too Many Platitudes"

There was support for the criticism put forward by one delegate that the conference had heard "too many platitudes" and "too little realistic thinking." Disappointment with the results were expressed by some delegates, and it was felt that whereas the publicity value of a conference of this size and character was useful, it was too big and ill-equipped to get down to grappling with the numerous and complex problems involved in increasing the productive capacity of our manpower. Such questions should be given detailed consideration by the voluntary organisations specialising in this field, many of whom were present at the conference.

MINISTER OPENS FOUNDRY BATHS



A locker room in the foundry baths opened by the Minister of Labour, Sir Walter Monckton, Q.C., M.P., at Newton Chambers and Co. Ltd., Thorncliffe, near Sheffield, on April 4th. Foundry workers leave their dirty clothes in one locker room, have a shower, and move on to the "clean" locker room, where they put on clean clothes and go home.

Cancer Survey

AN analysis of 15,201 cases of cancer drawn from the Greater London area showed that general and dock labourers head the list of occupations which show a "significant excess" of the disease among male patients. Other occupations listed (in order) are: brewers, publicans, barmen and

waiters; agricultural labourers, gardeners and florists; chemical workers, workers in pitch, tar, mineral oil, and makers of coal gas; singers, actors and clergymen; engineers, fitters and mechanics.

The survey points out that 19.22 per cent of the 14,182 patients with primary cancer survived five years, and had they gone to hospital while the disease was in its early stages the survival rate would have been 38.7 per cent. The disease was most prevalent in men and women between 60 and 65.

Wages Up 165% Since 1938

AVERAGE weekly earnings of 6,500,000 manual workers in manufacturing and other industries in October, 1951, was £7 1s. 1d., an increase of 165 per cent on 1938. Earnings of men increased by 141 per cent to £8 6s. a week, and of women by 177 per cent to £4 10s. 1d. Highest increase was for girls, whose average earnings were £2 17s. 11d. at October last, representing an increase of 213 per cent over 1938.

These figures, given in the *Ministry of Labour Gazette*, March issue, are general averages and cover all earnings including overtime, night work, and other methods of payment by results. Agriculture, coalmining, railways, transport, shipping, distributive and catering trades, entertainment industries, commerce, banking, domestic service and dock labour are *not* included in the general survey. (Miners had an average wage of £11 0s. 9d., and dockers £9 14s. 9d. a week.)

Average hours worked during October last were 46.1 per week, compared with 46.5 in 1938.

WAGES NEWS OF THE MONTH

BAKERS—Baking Wages Council has notified the Minister of Labour of proposals to increase statutory minimum remuneration by 2d. an hour for male workers over 21, 1½d. for female workers over 21, and 1d. for all other workers.

BANK STAFFS—Increased salary scales have been put into operation for the staffs of all major banks. Most of the changes involve some consolidation of the percentage cash payments which banks have been making to their workers.

BUSMEN—Bus and tramwaymen employed by municipal and privately-owned undertakings are proposing to submit an application for a wage increase of £1 a week.

CINEMA WORKERS — National Association of Theatrical and Kine Employees has received an "urgent demand" for a cost-of-living bonus from its members.

COLLIERY CLERKS—Pay increases ranging from 6s. to 8s. a week in general clerical trades, by 9s. 6d. in the next grade, and 11s. 6d. for the three clerical officer grades, have been made by the National Coal Board to about 25,000 men. Appropriate increases have also been made in the women's grades.

CO-OPERATIVE WORKERS—The Co-operative Union failed to reach agreement with the trade unions concerning the claim for a wage increase of 10s. a week for 280,000 employees of co-operative societies, and the claim has been referred to arbitration.

DOCTORS — Doctors under the National Health Service are to receive back pay from July, 1948, amounting to £40,000,000, an average of £500 a head.

ENGINEERS — Application for a substantial wage increase in respect of 2,500,000 engineering and shipbuilding workers is being considered by executives of the unions concerned.

FARM WORKERS—National Union of Agricultural Workers has decided to put forward a claim for a substantial increase in the national minimum wage for agricultural workers.

MINERS—Lancashire miners have tabled resolutions for the annual conference next July asking for a wage increase of 30s. a week, but it is expected that moves for a national pay increase will be made before then.

RAILWAY SHOPMEN — About 120,000 railway shopmen have been awarded a wage increase of 8 per cent.

RETAIL FOOD WORKERS—Retail Food Trades Wages Council has notified the Minister of Labour of proposals to increase statutory minimum remuneration by 10s. and 12s. a week to managers and manageresses, according to weekly trade, and 10s. and 7s. 6d. to all other workers over terminal age. Smaller amounts were proposed for young workers.

TELEPHONE OPERATORS—Telephone operators at Ministry of Civil Aviation airports have received a wage increase of 10 per cent. An additional 6s. 6d. weekly "lead pay" will be paid for emergency and operational calls.

WOMEN ENGINEERS — Women members of the Amalgamated Engineering Union have asked their executive council to submit an application for a substantial pay increase for all women in the industry.

T.U.C. is Critical

THE T.U.C., in its half-yearly report, criticises changes made by the Chancellor of the Exchequer, in the National Production Advisory Council on Industry. While approving the Chancellor's decision to maintain the council and its regional boards, it is critical of the decision, made in order to save money, to shift the secretarial work of the council from the Treasury to the Board of Trade.

Basis of the objection is that the Board of Trade is a production department and cannot be expected to have the same independence of outlook as the Treasury. It also condemns the Chancellor for having made this move without first consulting the council itself.

Paid Holidays

THE Treasury has agreed to give a second week's annual paid holiday to workers in Government industrial establishments. Between 400,000 to 500,000 workers will benefit.

Bakers' Roundsmen Included

THE Minister of Labour has received the Report of the Commission of Inquiry appointed under the Wages Councils Act, 1945, following an objection by the Dorset County Master Bakers' Association to the draft Order relating to the establishment of a Wages Council for the Retail Bread and Flour Confectionery Trade in England and Wales. The objection was to the inclusion of bakers' roundsmen within the scope of the proposed Council.

The Commission has now recommended that bakers' roundsmen should be included.

Experience Offered

UNIVERSITY students wishing to supplement their academic training by practical experience of industrial and commercial conditions are offered employment with the Dunlop Rubber Co. for six or eight weeks during the long vacation. There are 100 vacancies for men and women, aged 18 upwards, at salaries ranging from £3 to £6 a week.

Older Workers' Committee

THE National Advisory Committee on the Employment of Older Men and Women held its first meeting in London last month, under the chairmanship of Sir Peter Bennett. In preparing their plan of work they decided to give first consideration to retirement policy in industry and commerce, including the effect of pension schemes.

Ro.S.P.A. Conference, 1952

THE National Industrial Safety Conference for 1952 will be held at Scarborough from May 16-18. A trade exhibition of industrial safety appliances will also be held. Subjects to be discussed include "Accident Prevention in the Future," by Dr. W. G.

Hiscock; "Safe Handling of Materials," by C. R. Wynne-Roberts; "Training and Lecture Techniques," by R. N. Le Fevre; "Contractor Vis-a-Vis Occupier," by H. E. Phillips; "Permit to Work Systems," by H. M. Page; and "Slippery Floors," by Dr. F. C. Harper.

Applications to attend should be made early to the Industrial Safety Division, 131 Sloane Street, London, S.W.1. Cost is £6 6s. per delegate, including meals and accommodation.

Too Many Architects?

IN his presidential address to the governors of the Royal Manchester Institution, Mr. Francis Jones spoke of the dangers of training too many architectural students. He stated that there were thousands of such students at present, and he urged the authorities concerned not to train for the next six years more pupils than those for whom work could be found.

Disabled Operatives

AS part of its plan to urge increased occupational opportunities for handicapped persons, the British Council for Rehabilitation held a residential course on "The Reabsorption of the Disabled into Industry" at Birmingham during March.

Personnel managers, medical officers, Ministry of Labour officials and industrial leaders were among those who attended. Emphasis was put on the possibility of breaking down existing processes into jobs that a disabled operative might well do, and the Council recommended that certain traditional job operations — for example, machining that is done standing—could be adapted by a judicious rearrangement of controls into a repetition process for a seated employee.

Not only the welfare of the disabled, but also industry's need of manpower is stressed in the Council's attempt to persuade managements to become more "disabled conscious."

Safety for Farmers

POWERS to control the use of poisons in farm work are proposed in the Agriculture (Poisonous Substances) Bill. The main purpose is to protect employees from risks of poisoning. Regulations may provide for protective clothing, decontamination facilities, instruction of workers, and limitation of periods of exposure to danger.

Coaches on a Course

THE Central Council of Physical Recreation is holding courses this summer for sports leaders and coaches at residential centres near Marlow and Newport. Courses last from seven to ten days, and fees vary from £5 10s. to £8, including tuition and accommodation. Details from the General Secretary, 6 Bedford Square, London, W.C.1.

Call-up Deferred

ARRANGEMENTS are being made made by the Ministry of Labour to allow deferment of call-up for a limited number of men in highly skilled occupations. Deferment will be for not more than two years after completion of apprenticeship where full use is being made of the men's skill on certain specified rearmament projects such as military aircraft, aircraft carriers, frigates and submarines.

"CEMENTING GOOD RELATIONS"

We are asked to correct certain figures quoted in the condensation from *Co-partnership*, on page 433 of our April issue. The Blue Circle Cement group pay sickness benefit at the rate of 30s. per week for seniors and 12s. for juniors. Industrial injury benefit is 12s. a week for seniors, nothing for juniors. The company pays half these benefits and all administration costs. Any surplus of employees' contributions is shared out among members at the end of each year.

PERSONNEL MAN'S AWARD

Mr. F. W. Smith, personnel officer at the London ice-cream factory of T. Wall and Sons Ltd., receives a gold watch for 15 years' good service from his chairman, Mr. Cecil W. Rodd. The presentation was made at the Albert Hall, where Mr. Smith was one of eighty so honoured.

The Minister Said . . .

Answers to Questions in the House

Training Economy

Number of training places at present available at Government centres was 3,623. Despite the needs of rearmament and the necessity for training the disabled, a 13 per cent reduction in costs had been made to meet current economic circumstances. (*Minister of Labour*, March 18, 1952.)

Foreign Miners

The total number of foreign workers recruited for the mining industry under organised schemes was 19,400, of whom 12,300 were still employed on March 15. (*Minister of Fuel and Power*, April 1.)

All Had a Rise

There was no industry or group of workers among those whose wage rates were recorded by the Ministry of Labour, who had not received a wage increase since 1946. No records were available for unorganised groups of workpeople, or for salaried workers or those paid by fees. (*Minister of Labour*, March 20.)

Hardship Allowance? Perhaps

Consideration was being given to amending the industrial injuries regulations to secure hardship allowances for injured workmen who continued in employment six months or more before having operational treatment for a condition arising directly from industrial injury. (*Minister of National Insurance*, March 31.)

More Canteen Customers

The number of meals served weekly in industrial canteens rose from 55 million in December, 1944, to 58.6 million in November, 1950. (*Minister of Food*, March 31.)

Elderly Persons

Representation of women on the national advisory committee dealing with the employment of elderly persons might be increased. (*Minister of Labour*, April 1.)

Factory Inspection (Wales)

On January 1, 1952, out of 9,837 factories in Wales, twenty-four had not been visited by an inspector since 1946. (*Minister of Labour*, March 18.)

Holidays With Pay

Among the industries for which information was recorded by the Ministry of Labour, thirty-seven provided one week's paid holiday, and 114 two weeks' paid holiday, in addition to public holidays, for wage-earning manual workers. There was also a small number with arrangements for periods between one and two weeks. No information was available for non-manual workers. (*Minister of Labour*, April 3.)

Clever Planning Converted this Basement into a Modern Canteen

By WINIFRED GODE

In this canteen-under-a-car-park, the disadvantages of a low-ceilinged, triangular site have been offset by skilful "camouflage" and use of colour, air-conditioning, acoustic treatment and a corridor right round the perimeter. The 24-hour service provides daily 100 breakfasts, 600 lunches and 300 dinners (plus another 70 at midnight).

Self-service counter fitted with interchangeable containers for the *à la carte* menu. Note sound-absorbent ceiling.

IT seems a far cry from a couple of oil stoves and a trestle table set up in a corridor to the modern canteen recently opened at Bush House to cater for the staff of the B.B.C.'s overseas services. But this is the transformation which has been effected since that day in 1941, when the bombs fell and the catering section were called upon to provide a 24-hr. meals service for staff engaged on the important job of broadcasting or monitoring on overseas networks.

The new canteen is itself an example of ingenuity in planning. It started life as a maze of coal-holes, store-rooms and veritable "dungeons" underneath the car park at Bush House. The disadvantages of such a site are obvious: low ceilings; no natural lighting; no ventilation, and inadequate drainage. Furthermore, the site was triangular in shape and cut across by iron pillars supporting the roof. But thanks to careful planning and clever designing, none of these difficulties is apparent in the finished canteen.

As people using the canteen have to travel from two different wings of the building, it was decided to build a corridor right round the outside of the canteen to permit entry and exit without creating confusing streams of cross traffic in the restaurant itself. This also allows for the transport of goods from store-rooms to kitchen. The trunking of the air conditioning plant is housed in this corridor, so that from the restaurant only neat grilles are visible at intervals around the walls. This is a very useful arrangement, because trunking attached to the low ceiling of the restaurant would have served to emphasise this defect.

Noise Reduced

The lowness of the ceiling has been admirably disguised by the use of shallow bowl lights fitted flush, while the use of patterned floor-covering, flower arrangements and pictures hung at eye level, all help to focus attention away from the ceiling. The acoustically treated ceiling reduces to a pleasant murmur the noisy clatter common to most canteens, and especially obvious in basement premises. Loudspeakers for broadcasting internal messages are also set in the ceiling.

The iron pillars have been built round with breeze blocks and faced with Formica to match the walls, and so brought into proportion with the rest of the room. Those pillars against the walls have been built up in the same way, and balanced with dummy pillars to form alcoves. These are decorated in buff colour to contrast with the pale grey walls and help to break the monotony of long low stretches of wall. Similarly, alcoves have been built around the entrances and house the telephone booths. An illusion of height and spaciousness is also created by the colour scheme of pale grey, with chairs upholstered in blue and brown, highlighted by primrose-coloured table tops and maroon service trolleys. Gilt basket-work "perambulators" carry stacks of green trays, and match the flower containers. Pride of place over a doorway is given to a plaque presented by the Dutch Government for services rendered to its nationals by the Bush House canteen during the war years.

Kitchen Equipment

The kitchen is also triangular in shape, and in the tip of it is the washing-up room. A central 16 ft. unit was designed by Radiation Ltd. to incorporate a three-pan fish-fryer, a five-oven range, three boiling pans, and a bain-marie. As it was found necessary to build this unit around one of the supporting pillars, a

The head chef, Mr. J. A. Frei (left) supervises work in a corner of the triangular-shaped kitchen. Fish fryer and two ovens of the Grosvenor range—part of the special central unit—in foreground; Belgravia hot-closet and Savoy griller at the back.

dummy stove was included to give an unbroken working surface. Two steamers, a griller and a hot-closet also form part of the equipment, while a pastry oven and boiling table are housed in a small bay off the kitchen. All cooking equipment is heated by gas.

24-hour Service

This canteen, which provides a 24-hr. service, daily serves about 100 breakfasts, 600 lunches, 300 dinners, and an additional seventy dinners at midnight, as well as morning coffee, afternoon teas, etc. The staff works in three shifts—alternating day shifts and a permanent night shift—with a day and night supervisor, all under the control of the manageress.

Menu planning has its difficulties, since the canteen caters for employees of all types. About forty different nationalities are represented and efforts are made to provide some of their native dishes. Disputes are referred to the canteen advisory committee who try to strike a balance which suits the majority of the customers.

Apart from the routine cafeteria service, the staff may be called upon at a moment's notice to provide a cocktail party or banquet for visiting Royalty or V.I.P.'s from overseas. A small outdoor catering staff may be called upon to help in these circumstances, while headquarters will draft in extra staff or supply extra equipment if needed.

While this, like other B.B.C. canteens, is under the direct control of the manageress, all rations and equipment are bought and stored centrally and then requisitioned by the individual canteen according to its needs. This helps the problem of storage space on the canteen site, and gains the advantages to be had by bulk purchasing. There is an agreed policy laid down on the general structure and costing of menus, but extras can be purchased by the manageress if she requires them. National or regional conferences of manageresses are held from time to time.

New recruits are sent to selected canteens, where they are given on-the-job training before being posted. All the health, recreation and similar facilities available to all grades of B.B.C. employees are also available to catering staff.

Onion Recipes

Onions Without Tears. Jean Bothwell. The World's Work (1913) Ltd. 10s. 6d.

THIS is one for the bookshelf of the of the canteen manager or manageress. Miss Bothwell presents some 250 tested recipes for the use of the onion and its cousins—leeks, chives and garlic—in soups, breads and pastries, salads, sandwiches, and hors d'oeuvres, and with meat, fish and fowl.

MANAGEMENT BOOKSHELF

Good Work Well Done

Christianity and Human Relations in Industry. Sir George Schuster. Epworth Press. 6s. 6d.

SIR GEORGE SCHUSTER'S Beckly lecture (the Beckly lectures are delivered each year on a "social service" topic under the auspices of the Methodist Conference) is well reasoned, lucid and not marred by prejudice. Sir George discusses industrial relations from the viewpoint of one who feels that Christ's words are as apt today as they were 1,900 years ago. He declares that the Christian must believe the best, and work for it, and that ignoring inevitable disappointments and overcoming suspicions he must press forward to the only satisfying goal for industry, that of giving all engaged in it the foundation of a "good life." This he sees as good work well done in conditions of liberty, and in an atmosphere of love and comradeship.

In this crusade all ranks in industry must give much.

What is the aim of industry? Is it to make money, to give employment, to build an empire? What indeed is the object of man's daily labour? To earn his bread only, to earn leisure? Is it something to be escaped from at the earliest possible moment, the worker having given as little as he can for as much money as he can screw out of niggardly employers?

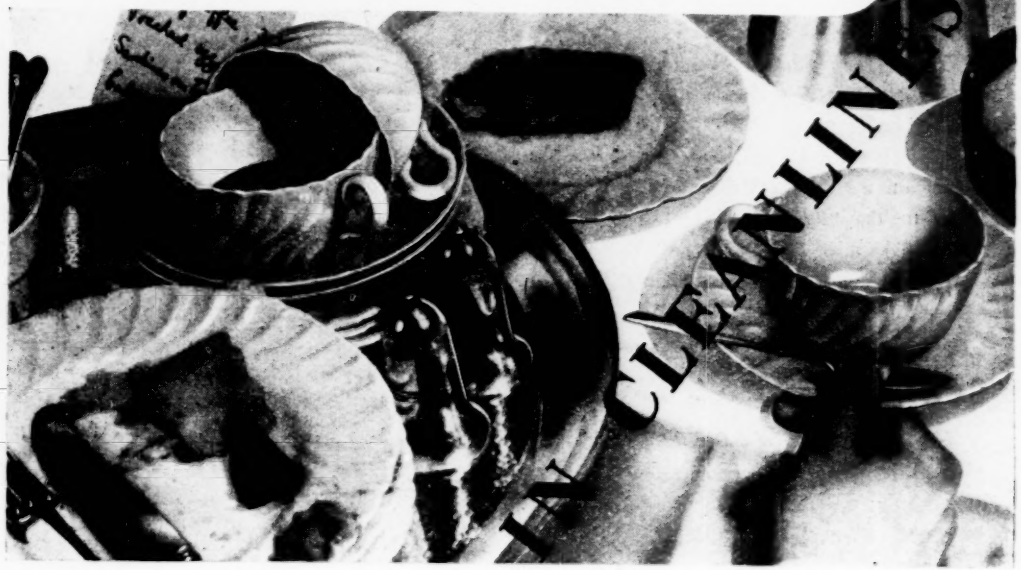
Sir George finds the answer in the Sermon on the Mount and in the scriptural injunction "seek ye first the Kingdom of God." He argues that the primary responsibility of management is to do everything possible to ensure that the working life of industrial employees fits in with, and forms part of, a good life in the highest sense. This involves intense intellectual effort in connection with a vast range of questions on human relations. He places personnel management in the first flight of importance. Further, on the workers' side there must be recognition that creative work in a spirit of service is an essential condition for a good life.

The building up of effective working groups within each factory is seen as of major importance for good relations of workers with each other.

The conclusion is reached that if management in general plays its part efficiently and in the right spirit there will be a response on the workers' side sufficient to keep the way open for continuing progress. The stipulation "in the right spirit" means that it must seek to create good human conditions and establish the right human relations as *ends in themselves* and not merely as a means for getting better production results.

HAROLD CHAMPION, M.A.

ALL CHINA & CUTLERY IN THIS ESTABLISHMENT WILL COME BACK TO THE TABLE CHEMICALLY CLEAN



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To look clean is one thing, to be chemically clean is quite another. China and cutlery can be made sterile as well as sparkling—quickly—with Chinabrite. Prepared specially for the Catering trade, it is suitable for machine or hand washing-up, saving time trouble and preventing infection. A trial will convince you.

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SANIGLAS. An inexpensive but powerful product for sterilising glasses in public houses.

STERKLENE. A strong Detergent specially graded for cleaning beer engines and pipe lines.

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New Industrial Equipment at the B.I.F.

EXECUTIVES' SURVEY OF AIDS TO INCREASED PRODUCTION

HERE is a preview of some of the exhibits to be seen at the 1952 British Industries Fair, which is being held as usual at Castle Bromwich, Birmingham, and Olympia and Earls Court, London, from May 5 to 16. The items featured on this and the succeeding four pages represent only a fraction of the wealth of equipment which will be on view; but an effort will be made to make good some of the deficiency in future issues of this journal.

Most of the exhibits which are of interest to readers of PERSONNEL MANAGEMENT, WELFARE & INDUSTRIAL EQUIPMENT will be located at Castle Bromwich, although certain items, such as sports goods, foodstuffs, china and earthenware, etc., will necessitate a visit to the London end by those who are concerned with welfare and catering.

SAFETY & HEALTH

Comfortable Crutch

A TELESCOPIC crutch, in aluminium alloy, is designed to support elbow rather than armpit, and thus to give greater freedom and comfort to injured or disabled workers. Rubber ferrule prevents slipping and sponge rubber handgrips increase the user's comfort. Hinged forearm rest supports the arm and leaves the hand free to open doors. Total weight of one crutch is only 1 lb. 13 oz. Length can be rapidly adjusted. **(Concentric Manufacturing Co. Ltd.** D 222, Castle Bromwich.)

Shot Blast Respirator

THIS Microfilter dust respirator owes its inception to the Committee on Industrial Health of the British Steel Founders' Association. It is designed to be worn for long periods for sand and shot blasting.

The respirator comprises a moulded plastic facepiece and filter holder to which is fitted a soft sponge rubber face pad. This pad is supplied in two sizes, normal and large. The filter consists of a circular pad of merino wool impregnated with resin. It rests on a perforated metal platform and muslin diaphragm in the filter holder, and is held in place by a perforated metal plate and screwed plastic cover. Held in place by an elastic harness, the Microfilter is fitted with non-return inlet and outlet valves of low resistance. **(Siebe, Gorman and Co. Ltd.** D 251, Castle Bromwich.)

Healthy Spray Booths

WATER wash spray booths have been developed to safeguard the health of operators when spraying paint. With these booths, the overspray is said to be extracted more efficiently than with normal dry booths and the fumes are washed before being exhausted to atmosphere. **(Air Industrial Developments Ltd.** D 116, Castle Bromwich.)

Fly Killer

THIS is a revolutionary method of pest control. A D.D.T. cartridge is inserted, the diffuser heats this compound and vapourises the D.D.T. This lethal vapour is diffused by convection currents, and on contacting exposed surfaces deposits microscopic crystals of D.D.T. The diffuser is switched on when it is possible to keep all doors and windows closed—in most cases during the night. It is unnecessary to operate the diffuser at other times as the deposit generated has a lasting effect and will keep the premises free from insects. As the electric element is thermostatically controlled no personal supervision is required.

The diffuser may also be used for the evaporation of germicide to reduce the danger of infection.

Chlorophyl cartridges are available to combat odours in kitchens and cloakrooms. **(Falk, Stadelmann and Co. Ltd.** C 609, Castle Bromwich.)

Dust Collector

WHAT are the advantages of the unit system of dust collection? According to the manufacturers of the unit illustrated here, this system is generally the least costly to install, as only the very minimum of piping or ductwork is required. It also permits ready re-disposal of machines without troublesome and expensive duct and

foundation alterations. Individual machine operation and control, with attendant power saving, is permissible, and the risk of lost production owing to plant breakdowns is minimised. Money is also saved on heating where there is no objection to the cleaned and filtered air being returned into the workshop atmosphere.

The Tornado type "T" units, as shown, are designed for grinding and polishing machines. (Note the access doors which allow easy access to the filter chamber and dust-collecting tray.) Only dust-free air passes through the fan, and a discharge air baffle reduces the operating sound level to as low as 74 decibels. No permanent foundation is required for installation. **(Keith Blackman Ltd.** D 755 and 654, Castle Bromwich.)

Multi-purpose Creams

BESIDES protecting operators from industrial dermatitis, the barrier creams to be shown by Rozalex Ltd. have proved to have secondary applications. Hosiery manufacturers, for example, have found that the number of silk and nylon threads broken by the rough hands of their operators falls to a very low figure if the creams are applied before work is started.

A readily available supply of the barrier creams can be had from the Rex dispenser which is economical and protects the cream from contamination. **(Rozalex Ltd.** D 706, Castle Bromwich.)

CANTEEN

Quick Slicer

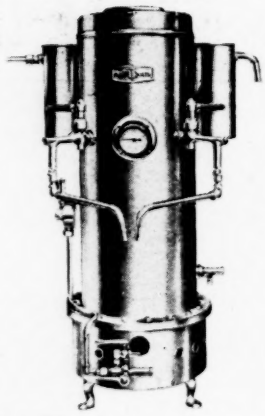
WITH the Streamline bread slicing machine, it is claimed that one girl can slice up to 450 loaves an hour. Loaves up to 6 in. square and 12 in. long can be cut—into slices of any thickness from $\frac{3}{32}$ in.—in one operation. The sliced loaf is held together in the outlet chute by adjustable plates. Double safety is provided for the operator. The machine will not work unless the loaf is covering the blades and the lid (which gravity feeds the loaf to the blades) must be kept closed, otherwise the motor cuts out. **(Concentric Manufacturing Co. Ltd.** D 222, Castle Bromwich.)

Running Buffet

FOR serving meals in executives' and staff dining-rooms, this electric buffet comprises dinner wagon, hot-plate carving table and hot cupboard. Several models are available with different arrangements of hotplates and shelves. Glass panels and doors enclose the hotplates. A single mains connection supplies power. Extra plugs for toaster, kettle, etc., are fitted, and a lamp on a flexible stalk can be provided. Unit is mounted on rubber-tyred spring castors. **(Bertram Thomas (Engineers) Ltd.** D 309, Castle Bromwich.)

Boiler and Cafe Set

DESIGNED to meet the demand for an appliance to give quick service at a moment's notice, the Maxol T boiler allows a bulk supply of boiling water to be drawn off very quickly from two or more draw-off taps, after which a continuous supply is obtained at a reduced rate of flow, according to the size of the boiler. The Maxol T is thermostatically controlled—automatic in action after the burners have been lit. It requires no further attention after the water has boiled. **(Maxol Heaters Ltd.** D 334, Castle Bromwich.)



Off-Peak Heater

THIS new water heater is designed to save fuel during peak consumption periods, yet supply large quantities of hot water at all times. It automatically raises the temperature of the water in a storage tank to a predetermined level during off-peak hours, and the water remains at this temperature for long periods. **(Berry's Electric Ltd.** C 507/406, Castle Bromwich.)

Kitchen All-rounder

POTATO peeling and chipping, vegetable dicing, grating and shredding, slicing, grinding, mixing, beating, mincing, dough kneading; these are just some of the operations that can be performed by the Chef Major, claimed to be the most versatile industrial catering aid available.

The equipment will be making its first appearance at the B.I.F. Even when it is not in use it can be used as a work surface, for the top is made of a flat sheet of Formica material. The sides and front of the cabinet are made of this same material, which is heat and stain resistant.

The various operations are obtained by a range of attachments which can be connected to one of three power outlets.

An interesting feature is the liquidising unit which liquidises vegetables and fruits and also pulverises non-cereals, etc., and blends and mixes eggs and other ingredients into drinks, sundaes, purées, sauces and the like.

The equipment is easy to operate and keep clean.

A three-speed control is fitted and the motors are designed to run off the

ordinary mains. Dimensions of the unit are: height 40 in., depth 21 in., width 29 in. **(Kenwood Electrics Ltd.,** C 313/212, Castle Bromwich.)

HEATING

No-scale Heater

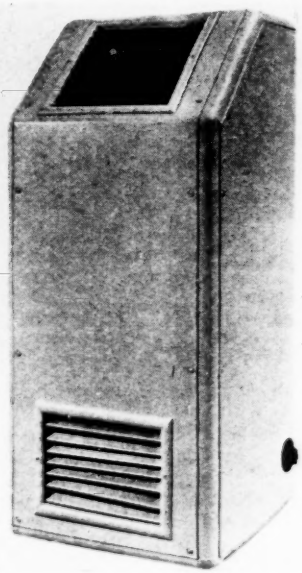
IN hard water areas, scale deposits on electric immersion heaters are often caused because the heaters have been placed in the secondary or tap water circuit. A new type of heater, to be shown for the first time at the B.I.F., can be fitted into the primary water circuit of a calorifier type hot water cylinder, and is not then subject to deposit. **(Range Boilers Ltd.** B 300, Castle Bromwich.)

Space Heater—I

A UNIT heater designed for high level mounting where unrestricted space must be available below overhead travelling cranes, etc., will be shown for the first time. It operates on the vertical discharge principle. An interesting exhibit will be equipment that is used for eliminating excess moisture in the atmosphere of laundries, dye-houses, etc. **(The Spiral Tube and Components Co. Ltd.** D 710, Castle Bromwich.)

Space Heater—II

STEAM or hot water can be used to operate the Universal forced convection heater. It is an adaptable unit which can be supplied for mounting in any position and is particularly suitable for industrial use. It has removable sound-insulated panels to ensure quiet running. The vertical or horizontal slats of the outlet louvres can be adjusted through 90 degrees and warm air may be directed to any part of the room. A fresh air intake can be fitted on the opposite side of the



cabinet to the room inlet (a grille in the base) and a damper is provided to regulate the amount admitted. Capacities vary between 40,500 and 16,000 B.Th.U.'s per hour according to velocity of air flow. **(The British Trane Co. Ltd.** D 330, Castle Bromwich.)

HANDLING & STORAGE

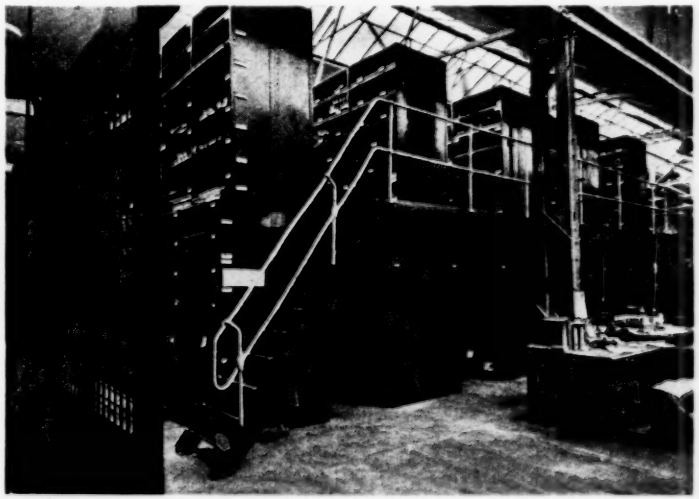
Self-loading Elevator

BUILT for mounting on a tractor, the Autoloader can be used for transferring gravel, stone chippings, sand or other loose materials (speed, 1 cu. yd. per min.) from the ground into lorries or railway wagons. Material is collected by a scoop at the back and transferred by Archimedean screw blade on to a continuous bucket system. From there it falls into a trough conveyor that projects over the vehicle. The Autoloader can be handled by one man and driven on the road. **(T. and T. Works Ltd.** 1331 and 1230, Castle Bromwich.)

Space-saving Shelves

AN example of multi-tier shelving on show will demonstrate how saving of storage space can be effected by building upwards (see photograph). This Adjusteel shelving can be had in both single and multi-tier arrangements. Among the other steel office and works equipment to be exhibited will be Maxim racks, for the storage of rod, bar and strip; Vispan racks and tool stands; thirty different models of cycle stand—for both internal and external use; work benches; steel anchor floor plates for factory flooring; and lockers for the housing of clothing and other purposes.

In conjunction with the stores equipment, exhibits will show how efficient control may be exercised over the various items in store by the use of Seldex visible recording equipment and systems. Another exhibit will feature steel partitions for the sub-division of



factory and office, including a new type to take a heating panel. **(Constructors Ltd.** D 401/300, Castle Bromwich.)

Clutchless Truck

OUTSTANDING feature of the Conveyancer fork lift trucks is their automatic turbo drive. This has no clutch or conventional gearbox and lever and as a result, driving controls

are reduced to a minimum—three—and the frequent servicing necessary with clutches is eliminated. Models can be driven by petrol or diesel engines or by battery-operated electric motors. Capacities of the different trucks range from 6,000 to 2,000 lb. Many attachments for handling different materials will be shown, including cranes, squeeze clamps, rotating side shifters and shovels. Any of these can be fitted to the trucks in place of the normal forks.

On the stand will be a projection theatre where a 35 mm. 16 mm. film entitled "Fork Lightening," dealing with the manufacture and applications of these trucks, will be shown. **(Conveyancer Fork Trucks Ltd.** D 616, 717 and 1358, Castle Bromwich.)

Truck Movers

INDUSTRIAL engine truck movers (320 and 420 c.c.) for use in marshalling yards and sidings, will be on view. The 420 c.c. model can move 75 tons of trucks under the control of one man. It has a three-speed gearbox and a free-wheeling device, and can negotiate railway points and also rough ground between sidings. **(B.S.A. Cycles Ltd.,** Outdoor 1326, Castle Bromwich.)

Crane Weigher

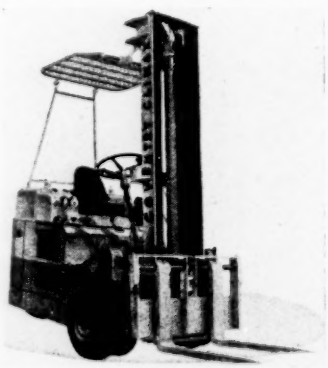
THIS most unusual weighing instrument is manufactured for use in conjunction with a crane. When it is fitted between the crane hook and the goods, the weight of the latter can be read simultaneously with their lifting and transference from, for instance, a railway wagon into the hold of a ship. At the moment this machine is made

in many capacities between 10 cwt. and 120 tons, with equivalent metric alternatives, and can be fitted with either bottom hook or shackle. In many sizes, it can be stamped by the Board of Trade for use as a trade weighing machine.

Further, the crane weigher provides the simplest and quickest means of testing the load capacity of the crane itself. **(Geo. Salter and Co. Ltd.** A 407 and 306, Castle Bromwich.)

Fork Truck

SMALLEST and latest addition to the Climax range of fork lift trucks is the T.S.M. (capacity 1,500 lb.) It is intended especially for use in confined spaces. It goes through a doorway 3 ft. wide and 6 ft. high fully loaded and can turn in a 56 in. radius or negotiate intersecting aisles 55 in. in width. Power is supplied by a four cylinder 8 h.p. petrol engine and the gearbox gives two forward and two reverse speeds. Loaded travelling speed is 6½ m.p.h. Lifting speed of the forks is 40 ft. per min. and the angle of tilt is 10 degrees back and 3 degrees forward. **(Coventry Climax Engines Ltd.** 1342, Castle Bromwich.)



POWER TOOLS

Automatic Flame Cutting

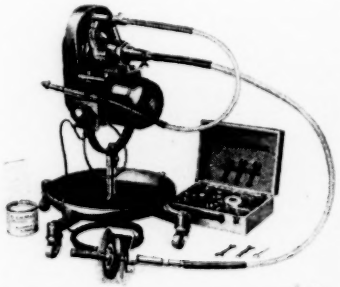
THIS oxygen cutting machine can be used for a variety of different jobs such as a straight line, circle and bevel cutting, contour cutting, and as a flame planer. Its body is made from aluminium alloy; this helps to keep the weight down to 47 lb. For normal straight cutting a flexible track is used and V-grooved wheels connected to the induction-type electric driving motor propel the machine along the rails. A control knob allows the speed to be varied from 3 in. to 27 in. per min. The machine will also run on a steel channel and this arrangement is useful for parting off billets or bars and for very long straight cuts.

A radius bar is fitted when circles larger than 20 in. in dia. are being cut. Smaller circles are cut by means of an auxiliary centre clamped in a channel under the body. Crabbing rollers, when fitted, enable the machine to follow a template laid down on the work. Other attachments can be provided for oval cutting and for converting the machine to a flame planer.

The burners are of the split type and the heads swivel for bevel work. They are designed to burn several gases including acetylene, coal gas and propane. Starting, stopping and reversing switches are provided for the motor and all the controls on the machine are protected to prevent accidental operation. **(Hancock and Co. (Engineering) Ltd.** D 739 and 638, Castle Bromwich.)

Fur Removers

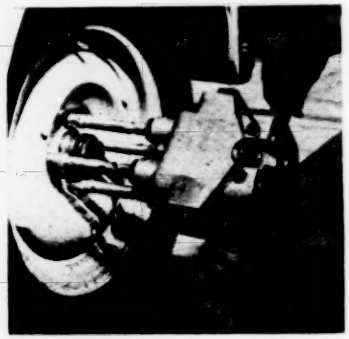
FLEXIBLE-SHAFT power drives that can be used with various



types of head for removing fur and scale in boilers, condensers, etc. will be shown. A typical outfit is the Skatoskalo which has a 2¼ h.p. mains motor on a trolley, a flexible, metal-sheathed shaft 23 ft. long, and various sizes of rotary scaling heads. **(Flexible Drives (Gilmans) Ltd.** D 506, 1345/1244, Castle Bromwich.)

Speeds Assemblies

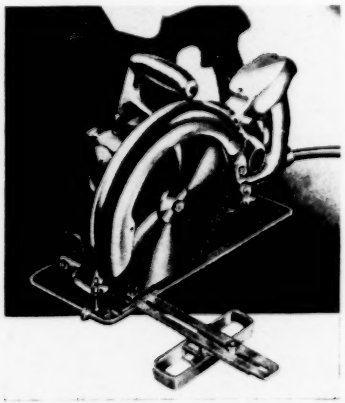
A DEVICE which can make considerable economies in time and labour on assembly lines will make its debut



at the B.I.F. It is a new, powerful pneumatic motor for operating multiple nut and stud runners. Only 1¼ in. in dia. and 6½ in. long, this motor weighs 2 lb. 9 oz. and develops nearly ¾ h.p., with a torque base of 500 in. lb. Because of its compactness and light weight it makes possible the multiple tightening of closely grouped nuts; the motors can be grouped together down to 2 in. centres. The operator feels no torque reaction. The motor stalls against controlled air pressure and this ensures complete uniformity of tightening; ¼ in. and ⅜ in. nuts can be run down to optimum tightness. No further checking is necessary because the torque is automatically controlled by pressure regulators. **(Desoutter Bros. Ltd.** C 415, Castle Bromwich.)

Portable Saw

INCLUDED among a display of portable power tools on the stand of Black and Decker Ltd. will be the Ripsnorter electric saw. There are two models, one to take a 7 in. and the other a 9 in. dia. blade. Various



types of blade are available for rapid cutting of wood, brick, tile, cement, asbestos, non-ferrous metals, cast iron and ceramics. Electric drills will be on show with capacities ranging from ¼ in. to 1 in. in steel, or double these sizes in hardwood. Holesaws increase the capacity of many of these drills and this means clean round holes up to 4 in. in dia. can be cut in any material which a hacksaw would cut. **(Black and Decker Ltd.** C 607, Castle Bromwich.)

Safe Feeding

THE output of a machine, such as a press, is vastly increased when the flow of material to it can be made regular and continuous. Automatic stock reels ensure this regularly and a new type of this equipment will be on display at Castle Bromwich. The device has a power-operated lifting mechanism which means that the coil of material need only be rolled into position on the cradle. It is then automatically raised to the correct position when a button is pressed. Coils of metal up to 20 in. wide and with a maximum outside dia. of 48 in. can be accommodated. **(Rockwell Machine Tool Co. Ltd.** D 159, Castle Bromwich.)

WELFARE

Attractive Walls

COLOURED cement finishes for walls and various types of cement floors will be displayed. A smooth finish material for internal decoration of cement, concrete, plaster, etc., will be shown for the first time. This material has been so compounded that it does not react (soften and turn yellow) with the lime in the cement. Dust from concrete floors can be a menace to workers and machines alike. Preparations will be shown which eliminate this dust when applied to concrete surfaces.

Various other products will also be included in the display, such as Waterbar, a material which ensures that joints are water-tight when basements, underground tunnels, etc., are being constructed. **(Sealocrete Products Ltd.** B 614, Castle Bromwich.)

Adaptable Cistern

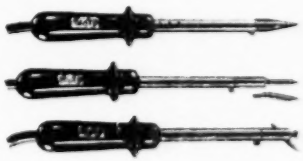
DESIGNED for economy in installation costs and space, Reverso moulded plastic low-level cisterns can often be installed at less cost than high-level cisterns. The double stocks usually fitted to this type of equipment have been eliminated; they are replaced by a side lever action. Lever and inlet are reversible. The Reverso is particularly useful for replacement work where there is no room to fit a low-level suite. A cranked flush bend enables the unit to be fixed at a medium level. **(Shires and Co. (London) Ltd.** B 700, Castle Bromwich.)

Non-slip Floors

INTRODUCED quite recently, Furmoto non-slip floor cream, special grade, is intended for use on rubber, asphalt and composition type floors. It contains no solvent, and is consequently harmless to these surfaces. This cream is claimed to be very economical in use; for best results it should be applied sparingly, one pint being enough for about 2,000 sq. ft. of floor. It can be applied by any of the usual methods and should be polished afterwards. **(The Furmoto Chemical Co. Ltd.** D 16, Olympia.)

MISCELLANEOUS

Straight-handled Irons



THREE new models have been added to the Wolf range of electric soldering irons. They are all of the straight-handled type that is essential for electrical and instrument work, particularly on complicated radio or telephone equipment where many thousands of connections may be necesary in a small space.

The irons, which have hardwood handles, can be supplied for working off all standard voltages and the heating elements are designed to provide a rapid and constant heat. A heat-deflecting skirt is provided for the comfort of the operator.

Cable Stripper

WITH the Hyde cable stripper, the cable is merely laid in position (correctly centred by an adjustable guide), and the hand lever pulled towards the operator. The stripper grips the cable, cuts through the insulation, strips to required length and releases the cable, all in one quick operation. **(J. B. Hyde and Co. Ltd.** C 712, Castle Bromwich.)

Summary of Official Publications

READERS' GUIDE TO ACTS, STATUTORY ORDERS, NEW RULINGS AND AWARDS CONCERNING INDUSTRY AND PERSONNEL

BILLS

Nationalised Industries (Membership of Trade Unions) Bill. Dated March 19, 1952. Prohibits payment of money by boards of nationalised industries to certain organisations (e.g., friendly societies) which prohibit their members from being members of trade unions.

STATUTORY INSTRUMENTS, 1952

No. 373. The Pneumonoconiosis and Byssinios.s Benefit Scheme, 1952. Dated February 25, 1952, made by Minister of National Insurance under Pneumonoconiosis and Byssinosis Benefit Act, 1951. *H.M.S.O.*, 9*d*. (Provides for payment of benefit out of the Industrial Injuries Fund to or in respect of persons totally disabled, or who have died as a result of these diseases and who never received workmen's compensation. Operative from March 10, 1952.)

No. 404. The Milk Distributive Wages Council (England and Wales) Wages Regulation (Amendment) Order, 1952. Dated February 20, 1952, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(b). *H.M.S.O.*, 2*d*. (Amends Order M.D.(64), and increases remuneration payable (a) to a six-day worker for work on a Sunday if it is his rest day and not a customary holiday, and (b) for night work. Operative from March 16, 1952.)

No. 423. The Pneumonoconiosis (Benefit) Scheme (Revocation) Scheme, 1952. Dated March 4, 1952, made by Minister of National Insurance under Section 5, Pneumonoconiosis and Byssinosis Benefit Act, 1951(a). *H.M.S.O.*, 3*d*. (Revokes the 1943 benefit scheme, and contains transitional arrangements preserving certain rights, including the right to weekly payments for the period before the date from which such payments will be made under the 1952 scheme. Operative from March 10, 1952.)

No. 424. The Byssiniosis (Benefit) Scheme (Revocation) Scheme, 1952. Dated March 4, 1952, made by the Minister of National Insurance under Section 5, Pneumonoconiosis and Byssiniosis Benefit Act, 1951(a). *H.M.S.O.* 3*d*. (Revokes the 1943 benefit scheme, and contains transitional arrangements preserving certain rights, including the right to weekly payments for the period before the date from which such payments will be made under the 1952 scheme. Operative from March 10, 1952.)

No. 461. The National Insurance and Industrial Injuries (Reciprocal Agreement With France) Order, 1952. Dated March 10, 1952 made by the Queen's Most Excellent Majesty in Council under Section 64, National Insurance Act, 1946(a), and Section 85, National Insurance (Industrial Injuries) Act, 1946(b). *H.M.S.O.*, 4*d*. (Gives effect in England, Wales and Scotland to supplementary reciprocal agreements on social security between the Governments of the United Kingdom and France. Operative from March 17, 1952.)

No. 495. The National Insurance (Industrial Injuries) (Insurable and Excepted Employments) Amendment Regulations, 1952. Dated March 7, 1952, made by the Industrial Injuries Joint Authority, under Part III, First Schedule, National Insurance (Industrial Injuries) Act, 1946(a). *H.M.S.O.*, 2*d*. (Amend the 1948 regulations by including among insurable employments, medical or dental practitioners employed by Regional Hospital Boards of Governors of Teaching Hospitals under the National Health Service, where the practitioner is employed in two or more jobs, and is wholly or mainly engaged in such employment. Operative from March 31, 1952.)

No. 608. The Stamped or Pressed Metal-wares Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1952. Dated March 21, 1952, made by Minister of Labour and National Service under Section 10, Wages Councils Act, 1945(b). *H.M.S.O.*, 3*d*. (Amends Order Q.(70), by increasing statutory minimum remuneration payable. Also excludes registered disabled employees of Remploy Ltd. Operative from April 7, 1952.)

No. 626 (S.24). The Temporary Workers in Agriculture (Minimum Wages) (Scotland) Order, 1952. Dated March 22, 1952, made by Secretary of State for Scotland, under Regulation 25A, Defence (Agriculture and Fisheries) Regulations, 1939(a), continued by the Emergency Laws (Miscellaneous Provisions) Act, 1947(b), and Emergency Laws (Continuance) Order, 1951(c). *H.M.S.O.*, 2*d*. (Replaces the 1950 Order, and fixes new minimum rates payable to temporary workers. Operative from March 25, 1952.)

No. 634. The National Insurance and Industrial Injuries (Reciprocal Agreement with the Republic of Northern Ireland, Mercantile Marine) Order, 1952. Dated March 24, 1952, made by the Queen's Most Excellent Majesty in Council, under Section 64, National Insurance Act, 1946(a), and Section 85, National Insurance (Industrial Injuries) Act, 1946(b). *H.M.S.O.*, 2*d*. (Gives effect in Great Britain to the agreement relating to insurance and workmen's compensation for masters and members of crews of ships and vessels made between the Governments of Great Britain and the Republic of Ireland. Operative March 31, 1952.)

GENERAL

Annual Report of the Chief Inspector of Factories, 1950. Issued by the Ministry of Labour and National Service, March, 1952. Cmd. 8415. *H.M.S.O.*, 6*s*. 6*d*. (See also page 437 of our April issue.)

Report of a Commission of Inquiry on a Draft Order for the Establishment of a Wages Council for the Retail Bread and Flour Confectionery Trade (England and Wales). Issued by the Ministry of Labour and National Service, March, 1952. *H.M.S.O.*, 4*d*.

Choice of Careers Series No. 24, The Bricklayer. Issued by the Central Youth Employment Executive. *H.M.S.O.*, 1*s*.

Civil Defence. Manual of Basic Training, Vol. I. Pamphlet No. 9. **Reconnaissance and Reporting.** Issued by the Home Office, March, 1952. *H.M.S.O.*, 1*s*. 6*d*.

Civil Defence. Manual of Basic Training, Vol. II. Pamphlet No. 5. **Basic Methods of Protection Against High Explosive Missiles.** Amendment No. 2. Issued by the Home Office, March, 1952. *H.M.S.O.*, 4*d*.

INDUSTRIAL COURT AWARDS

No. 2360. Civil Air Transport. Reference: Claim by non-industrial clerical staff for payment for overtime and Sunday work. Award: In favour of workmen. (5/3/52.)

No. 2361. Tugboat Industry. Reference: Claim for adjustment of differentials and for an enhanced rate for work between midnight and 8 a.m. Award: The Court found the claim for adjustment of differentials not established, but awarded that work between midnight and 6 a.m. be paid for at time-and-one-third. (5/3/52.)

No. 2362. Petroleum Industry. Reference: Application for a wedding allowance of 3*d*. an hour. Award: Claim not established. (5/3/52.)

No. 2363. Civil Air Transport. Reference: Claim by stewards and stewardesses for wage adjustment upon abolition of North Atlantic Pay. Award: The Court awarded that the agreement of August 16, 1951, be implemented in accordance with the employers' offer. (12/3/52.)

INDUSTRIAL DISPUTES TRIBUNAL AWARDS

No. 111. Rates of Wages of Certain Workers Employed by a Firm of Manufacturing Stationers and Envelope and Account Book Makers in London. Claim: For observation by employers of agreement of May, 1951, between British Federation of Master Printers and the National Union of Printing, Bookbinding and Paperworkers, in respect of certain workers. Award: The Tribunal noted that the employers had agreed to pay the union rate in respect of two of the workers, and in the other cases they found the claim not established. (4/3/52.)

No. 112 Remuneration of Certain Workers Employed by a firm of Retail Drapers, Outfitters and House Furnishers in Scotland. Claim: For basic wage of £4 4*s*. 6*d*. a week, plus 9 per cent commission on all drawings over £42 10*s*. a week, for credit travellers. Award: The Tribunal found against the claim as stated, but awarded that total remuneration in any week should not fall below £5 11*s*. (4/3/52.)

No. 113. Wage Rates of Metal Dressers Employed on a Certain Type of Machine. Claim: Dispute over rates paid to operators of airless shotblasting machines. Award: Starting rate to be 5*s*. a week above district rate for foundry labourers rising after six months to 7*s*. a week, subject to the proviso that in no district shall the rate be above that of sandblasters and dressers. (5/3/52.)

No. 114. Remuneration of Certain Workers Employed by a Firm of Rope Manufacturers at Birmingham. Claim: For wage increase of 2*d*. per hour to adult males, 1½*d*. to females, and proportionate increases for juveniles. Award: Claim not established. (5/3/52.)

No. 115. Remuneration of Certain Workers Employed by an Electrical Engineering Firm in the North of England. Claim: That employers should pay district plater's rate for plater's work. Award: In favour of workmen. (7/3/52.)

No. 116. Payment Applicable to Certain Workers in the Film Producing Industry when Employed on Night Work on a Friday Night. Claim: Dispute concerning interpretation of specified agreement when night work is performed on a Friday night. Award: The Tribunal found that the agreement did not provide for payment for Saturday in the case under consideration. (11/3/52.)

No. 117. Rates of Wages of Certain Workers Employed in the Baking Trade in Grimsby. Claim: For minimum rates higher than those laid down by the Baking Wages Council. Award: Payment above current Baking Wages Council rates of 1*d*. per hour to male workers of 21 and over; ½*d*. to male workers 18 and under 21, and to female workers 21 and over; ½*d*. to male workers under 18 and to female workers under 21. (11/3/52.)

No. 118. Remuneration of an Apprentice Formerly Employed by an Employer in the Building Industry in London. Claim: For payment by employer of pay increase granted to apprentices under Building Industries Apprenticeship Scheme. Award: In favour of workman. (13/3/52.)

No. 119. Remuneration of Certain Workers Employed by a Firm of Garment Manufacturers in Leek. Claim: For payment of increases to pieceworkers in accordance with local agreements. Award: In favour of workmen. (13/3/52.)

No. 120. Observance of Certain Specified Terms and Conditions of Employment by a Firm at Macclesfield. Claim: That employers should observe recognised terms and conditions of employment in the textile industry in the area. Award: Claim not established. (13/3/52.)

No. 121. Rates of Wages of Manual Workers Employed by the Llanelly Corporation. Claim: For payment of 2*d*. per hour increase granted by the Glamorgan Joint Wages Board, June, 1951. Award: In favour of workmen. (18/3/52.)

No. 122. Rates of Wages and Conditions of Employment of Certain Workers Employed by a Stevedoring Firm at Glasgow. Claim: For establishment of minimum rates 15*s*. per week above those provided under N.A.T. Award No. 1581, 1950, and for certain overtime payments. Award: (a) Clerical workers—minimum wage

rate, 80s. a week at 18, increasing by 5s. for each six months' service to 150s. at 25; overtime after 5 p.m. (12 noon Saturdays) to be paid at time-and-one-half calculated at dockers' rate plus 3s., Sundays and public holidays at double time plus 4s. (b) Mobile cranemen—23s. 8d. per day from Mondays to Fridays, and 11s. 10d. for Saturday half-day; overtime to be paid at time-and-one-half calculated on above rates, and double time for Sundays and public holidays. (c) Storemen—130s. a week (individual rates to be negotiated for anybody unable to perform full duties of the job); overtime to be paid at time-and-one-half calculated on above rate, and double time for Sundays and public holidays. (18/3/52.)

No. 123. Rates of Wages and Conditions of Employment of Certain Workers Employed by a Stevedoring Firm at Glasgow. (As for Award No. 122 above.)

No. 124. Rates of Wages and Conditions of Employment of Certain Workers Employed by a Stevedoring Firm at Glasgow. (As for Award No. 122 above.)

No. 125. Rates of Wages and Conditions of Employment of Certain Workers Employed by a Stevedoring Firm at Glasgow. (As for Award No. 122 above.)

No. 126. Rates of Wages and Conditions of Employment of Certain Workers Employed by a Stevedoring Firm at Glasgow. (As for Award No. 122 above.)

No. 127. Rates of Wages and Conditions of Employment of Certain Workers Employed by a Stevedoring Firm at Glasgow. (As for Award No. 122 above.)

No. 128. Rates of Wages and Conditions of Employment of Certain Workers Employed by a Stevedoring Firm at Glasgow. (As for Award No. 122 above.)

No. 129. Remuneration of Certain Workers Employed by a Firm of Comb Manufacturers in Aberdeen. Claim: For wage increase of 11s. a week. Award: Existing minimum time rates of workers in the horn section to be increased by 5s. 6d. a week for male workers 21 and over, by 5s. for female workers of 18 and over, with proportionate increases for juveniles. (18/3/52.)

No. 130 Remuneration of Electricians Employed on Exhibition Work. Claim: For supplementary payment to electricians on exhibition work. Award: Additional payment of 2d. per hour. (19/3/52.)

No. 131. Annual Holidays in the Vehicle Building Industry. Claim: For additional week's summer holiday with pay. Award: In respect of annual holiday period for 1952, credits at the rate of one twenty-fifth of wages paid in respect of each week's work performed, computed at the net hourly rate on actual time worked up to 44 hours, shall accrue as from first pay week in February. (19/3/52.)

No. 132. Rates of Wages of Certain Women Workers Employed by a Firm of Publishers and Photographers at Tunbridge Wells. Claim: For observation by employers of agreed minimum district rates for women employed on folding, collating, cording, mounting, gumming, tipping in, banding, packing, etc. Award: Minimum rates: Age at entering employment—15-17, 35s. a week for first six months rising to 76s. on completion of training; 17-18, 38s. a week rising to 76s.; 18 and over, 43s. a week rising to 76s. Workers 18 and over to receive a cost-of-living bonus of 11s. 3d. a week in addition to the above rates. (21/3/52.)

No. 133. Grading of Certain Porters Employed at a Hospital Near Huddersfield. Claim: That certain workers be graded as Hospital Porters, Class II. Award: Claim not established. (21/3/52.)

No. 134. Salary Scales of Clerical Staff Employed at the Head Office of a Friendly Collecting Society in Manchester. Claim: For specified salary scale. Award: Claim not established. (25/3/52.)

THE MONTH'S DATES

British Association for Commercial and Industrial Education

May

23-25 Annual Conference. "Practical Lessons from American Practice." Oulton Hall, Clacton-on-Sea. (Jointly with Institute of Personnel Management.)

British Institute of Management

8-11 Management Conference. Cliftonville.

Industrial Welfare Society

2-5 "On Top of the Job in Supervision." (Foremen's Conference.) Dunblane Hotel Hydro.
7 "Canteens." Stoke.
14 Advisory Meeting. Sheffield.
15 Advisory Meeting. Bradford.
16-19 "Joint Consultation and Productivity." (Course for Works Committee Representatives.) The Hydro Hotel, Llandudno.
23-26 "The Successful Club." (Course for social and sports club members.) St. George's Hotel, Cliftonville.
29 Course for Supervisors. 48 Bryanston Square, London, W.1.

Institute of Industrial Supervisors

1 "American Foremanship Report." C. R. English. White Hart Hotel, Warrington. 7 p.m.
2-4 "Work Study for Supervisory Management." Dillington House, Ilminster, Somerset.
8 "American Foremanship Report." W. J. Izzard. Engineering Centre, Sauchiehall Street, Glasgow. 7.30 p.m.
8 Member's Discussion Night. The Chance Technical College, Crocketts Lane, Smethwick. 7.30 p.m.
12 Members' Discussion Night. Dudley and Staffordshire Technical College, Dudley. 7.30 p.m.
14 Foremen's Forum. West Bromwich. 7.45 p.m.

Institute of Personnel Management

2-4 Annual Conference of Staff Management Association. Eastbourne.
16-18 "Young Members" Conference. Buxton.

Institution of Mechanical Engineers

2 "Control and Recovery of Dust and Fume in Industry." R. Ashman. "Filter Efficiency and Standardisation of Test Dust." H. Heywood. The Institution of Mechanical Engineers, Storey's Gate, St. James's Park, London, S.W.1. 5.30 p.m.
6 "Industrial Health Engineering." R. J. Sherwood. The Institution of Mechanical Engineers, Storey's Gate, St. James's Park, London, S.W.1. 6.30 p.m.

Institution of Production Engineers

7 "Social Science as Applied to Industry." F. A. Wells. Victoria Station Hotel, Milton Street, Nottingham. 7 p.m.

Institution of Works Managers

6 "Management and Productivity." J. Ayres. Star and Garter Royal Hotel, Wolverhampton. 7 p.m.

Urchfont Manor

12-16 "Thinking, Speaking and Writing." (Course for committee members, etc.)

They Said . . .

QUOTATIONS OF THE MONTH

Mr. Julian Amery, M.P., at a meeting organised by Gloucester Unionist Association: "It has to be realised that management, capital and labour are all three indispensable to every industrial process. I think there must be co-partnership and profit-sharing in industry if production is to leap ahead as it must."

Mr. James Bamford, head of the National Foundry College, Wolverhampton, at the first presentation of diplomas: He hoped that in future the majority of students would be sponsored by their employers. The college existed to serve the industry, and while the number of students was increasing it could cater for many more.

Major-General Sir Edward Spears, at a luncheon of the Advertising Association in London recently: While the Chancellor had made a brave attempt to reintroduce incentives to increase production for wage earners, he had done nothing to encourage managers, executives, directors, and professional men, who were the real work-givers and producers in the country. They had almost reached the point at which they might say patriotism was not enough.

Mr. John Baker White, M.P., at a meeting in Canterbury: It was not possible to win the battle of recovery by working a 40-hr. week. He believed that it was necessary, and would be no considerable hardship, to lengthen the working week by an hour a day, from Monday to Friday, where it could be shown the extra hour would mean higher production.

Dr. A. T. M. Wilson, at a conference of the National Association for Mental Health, emphasised the importance of making greater provision in industry for the absorption of the mentally handicapped. He also stated that between one-third and one-sixth of all industrial sickness and incapacity was predominantly psychological and social in nature.

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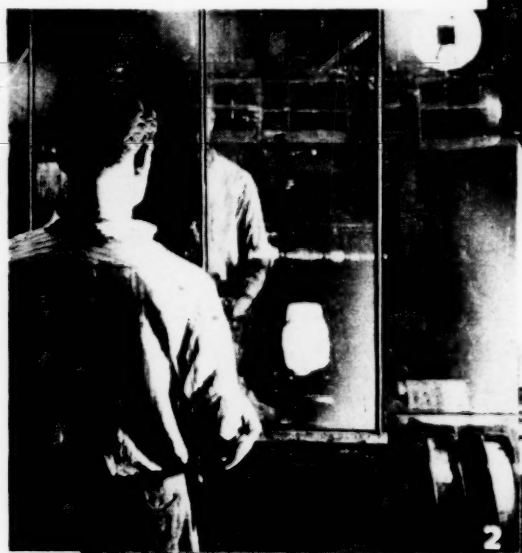

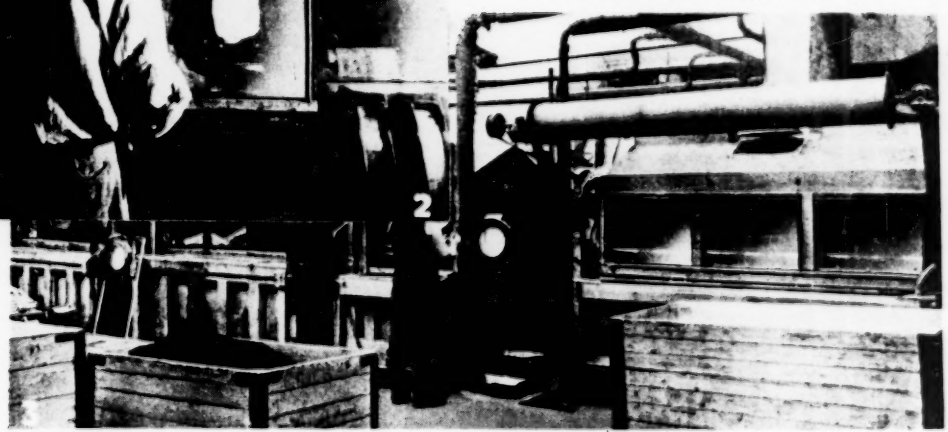

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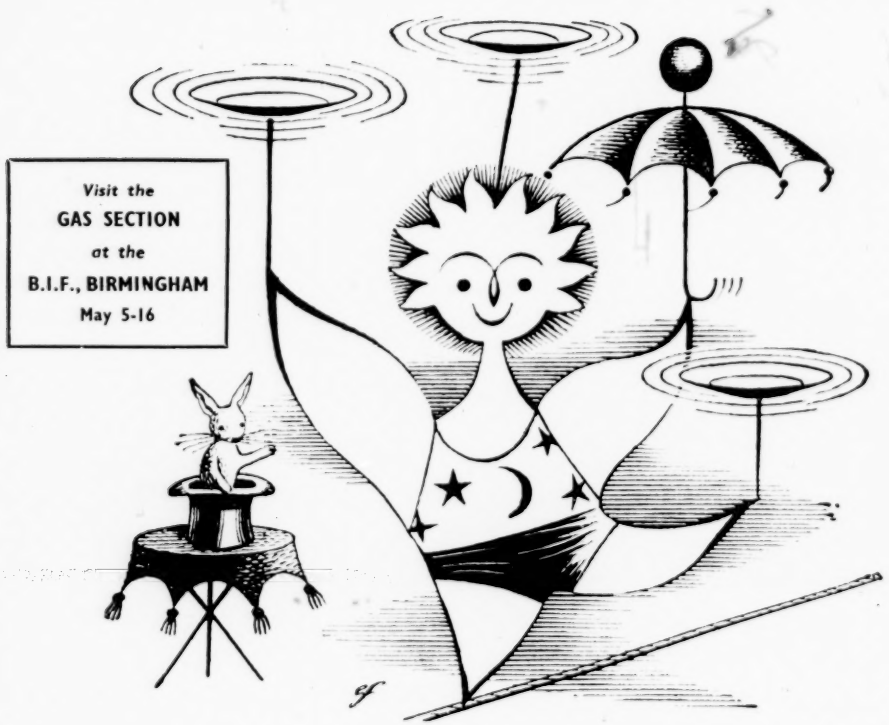

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When you call in Mr. Therm to solve your fuel problems, you get more than just a very willing worker. You get one that is capable of self-adjustment and rigid control of fuel consumption. You can cheerfully set the controls and leave gas-heated equipment to get on with the job *by itself*, for as long as you like. There are other advantages, too, of course: cleanliness, flexibility, rapid heating from cold and high efficiency. This is why Mr. Therm and his gas equipment are valued members of almost every industry's productive staff.

Speedy service

In the industrial canteen of Joshua Hoyle & Sons Ltd., Rochdale, Mr. Therm demonstrates one of his many virtues — speed. In ten busy minutes each day, he helps to serve 250 two-course lunches. The gas equipment used includes:—a fish frying range, steaming oven, cooking range, two 20-gallon boiling pans, dish washing machine and the usual labour-saving devices.

MR. THERM BURNS TO SERVE YOU THE GAS COUNCIL · GROSVENOR PLACE · LONDON · SW1

Printed for the Proprietors, The Shaw Publishing Co. Ltd., 180 Fleet Street, E.C.4 (CHA. 8844), by the Sidney Press Limited, London and Bedford.
May, 1952 Advertisement and Editorial Office, 180 Fleet Street, London, E.C.4.